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# East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

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17 January 1985

# EAST EUROPE REPORT

## ECONOMIC AND INDUSTRIAL AFFAIRS

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ALBANIA

SWEDISH CAMPAIGN TO INCREASE EXPORTS TO ALBANIA

Stockholm DAGENS NYHETER in Swedish 8 Dec 84 p 11

[Article by Disa Hastad: "Sweden Is Concentrating on Albania"]

[Text] Tirana 7 Dec 84--Swedish firms are carrying on a campaign at present that is directed toward increasing their exports to Albania. A delegation representing seven exporting enterprises is here in Tirana simultaneously with Cabinet Member Roine Carlsson, who signed a new trade agreement between Sweden and Albania on Thursday, 6 December 1984.

Mr Carlsson met with Minister of Foreign Trade Shane Kosbaci and Minister of Light Industry Vito Capo.

"Improving the balance of trade between our two countries is one of the most urgent considerations," Roine Carlsson told DAGENS NYHETER's representative.

Sweden now shows a considerable deficit in its trade relationship with Albania. During 1984 (from January to mid-August), Sweden purchased 80.9 million kronor worth of commodities, while the value of exports to Albania amounted to 11.6 million kronor. Furthermore, 90 percent of Albania's purchases are made in exchange for sales of Albanian products. It is mostly raw materials, and primarily chromium ore, that Sweden buys here. We sell machines and machine shop products to Albania.

However, there are projects in the mining industry, the field of energy and the chemical industry in which Sweden ought to be able to get involved.

In Tirana, where they are having mild fall weather just now, there therefore are representatives of Atlas-Copco, Alfa-Laval, Johnsson Ore Metal, Bofors Novel Cements, Fondmetall and Sukab.

Since 1976, Albania has consistently refused any loans or foreign credits. They only accept short-term-delivery credits. In 1983, the national debt amounted to \$50 million. Albania's biggest trade partner now is Yugoslavia again.

Albania regards itself as the only socialist country in the world and refuses to have anything to do with the superpowers--the United States and the Soviet Union--and does not have economic or diplomatic relations with either of them. (Last fall, the Soviet Union made some efforts to establish relations, but so far as is known no answer was given.)

They once cooperated closely with the People's Republic of China, but a conflict arose in 1978. However, diplomatic relations have been preserved and trade has now been resumed.

"But half of the population is still employed in agriculture. Albania is practically self-sufficient where foodstuffs are concerned and is well provided with natural resources otherwise," Mr Carlsson says.

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CSO: 3650/86

BULGARIA

HIGH ENERGY CONSUMPTION IN AGRICULTURAL PRODUCTION EXAMINED

Sofia PLANOVO STOPANSTVO in Bulgarian No 8, 1984 pp 30-36

[Article by Ivan Manolov, deputy chairman of State Planning Committee, and Dimitur Peychev, chief specialist on State Planning Committee: "Problems of Socioeconomic Development: Potential for Lowering Energy Consumption in Sectors of the National Agroindustrial Complex"]

[Text] In implementation of the December program of the Bulgarian Communist Party for raising the standard of living of the people, each year agriculture and the food industry are faced with the responsible task of producing a wider variety and larger volume of foodstuffs of better quality at minimum cost. Accomplishment of this important task is indissolubly linked to consumption of substantial amounts of imported and locally produced energy sources. As production intensifies, they represent an increasing share of the prime cost of output produced and are ultimately critical in determination of the use value, effectiveness, and foreign exchange recovery rate. Hence concern for economical and rational consumption of energy resources is a matter of primary importance having a direct bearing on the problem of accelerated and effective development of the national economy and the rates of its development.

The national agroindustrial complex (NAIC) is one of the basic consumers of energy resources in the country. It currently consumes about 20 percent of liquid fuels, and this consumption constantly tends to increase. Under the conditions of the world energy crisis and the limited domestic resources and import potential, the NAIC can and should play a significant role in bringing about a relative decrease in energy consumption.

The National Agroindustrial Complex includes not just agriculture and the food industry, but also sectors manufacturing means of production for them: production of machinery for agriculture and the food industry; production of mineral fertilizers, plant protection agents, and fuels and lubricants; and equipment for transportation of agricultural raw materials and processed output.

However conditional this distinction of the National Agroindustrial Complex may be, and whatever the inaccuracies allowed in defining its scope, this complex nevertheless exists and it must be considered in planning and accounting, as has been done by some countries after the Second World War, so

as to ensure the most effective possible utilization of energy resources. To solve this problem, intensive scientific research work is in progress to lower energy consumption and find energy sources in sectors of the agro-industrial complex.

Research on energy consumption in the NAIC shows that considerable energy is consumed before food products reach the end user. For example, depending on the structure of the fleet of machines and tractors, approximately 21 kilograms of conventional fuel are needed directly for production of 1 ton of wheat, while handling of grain on reception and storage at warehouses of the Zurneni khrahi State Economic Association, together with grinding of grain and baking of bread, requires about 71 kilograms, that is, 3.4 times more energy than that consumed in the direct production of wheat. In the aggregate, about 92 kilograms of conventional fuel are consumed in the production of 1 ton of wheat and the bread made from it. Addition to this energy consumption of the energy consumed in production of means of production (fertilizers, pesticides, machinery, and so forth) increases the consumption of conventional fuel to around 1140 kilograms of conventional fuel per ton, that is, multiplies it by 12. A similar situation exists in the case of other kinds of grain crops.

Energy consumption for production of end products for consumption is higher in the case of other kinds of agricultural crops. Consequently, the NAIC is a heavy consumer of energy, with consumption undergoing a manifold increase before the end product is reached. Thus, even the slightest lapses in consumption and the attendant waste lead to appreciable losses of national resources for which foreign exchange is spent.

Examination of the energy consumption structure reveals appreciable increase in artificial energy vehicles. In essence these are energy vehicles embodied in fertilizers, machinery, rubber articles, spare parts, and so forth. This is proved by the fact that, while consumption of fuels and lubricants in 1982 was 18 percent higher than in 1980, that of fertilizers and pesticides was 23.5 percent higher.

Intensification of production has a direct impact on increase in the consumption of artificial energy vehicles. The use of fast acting fertilizers, and accordingly energy consumption, is increased at the expense of stable manure and liquid fertilizers.

Mechanical control of weeds and enemies of crops by plowing of stubble-fields, harrowing, trench digging, and other operations, is increasingly giving way to chemical treatment with herbicides and pesticides. This in essence is the second prerequisite for increasing the amount of artificial energy vehicles in agriculture. Over the 1980-1982 period total agricultural output increased 3.8 percent on the average, while consumption of fuels and lubricants, fertilizers, and plant protection agents increased 7 percent.

The basic sources of energy consumption by the NAIC are the dark fuels, fuel oil and others, the relative share of which was more than 28 percent of the liquid fuels consumed over the 1980-1982 period. They are followed by motor fuels with 24 percent, propane-butane mixtures with more than 9.5



percent, automotive gasoline more than 8 percent, and others. More than 90 percent of the energy consumed in the NAIC is imported. It follows that in essence agricultural production and production in the food and tobacco industries depend directly on imports of these critical resources. This points to at least the following two goals for our work in the future: The most rational and economical use possible must be made of energy resources in the sectors of the NAIC; the use structure of energy sources employed in the NAIC must be modified to reduce consumption.

This is imperative for Bulgaria, and can be accomplished primarily by increasing the absolute and relative share of local energy sources, such as electric energy, coal, solar, wind, and geothermal energy, thermal energy discharged as a waste product in production processes, the energy obtained as a waste biomass in agricultural and forestry production, increase in the efficiency of solar energy utilization, and so forth.

Appreciable energy savings can be realized through decrease in consumption of mineral fertilizers and plant protection agents and through increase in their effectiveness. Research in the United States has shown that such decrease in that country can be of the order of about 10 percent of the current level of consumption. Statistical data indicate that in recent years in the United States and the Hungarian People's Republic the consumption of mineral fertilizers is decreasing or is remaining steady. Despite this fact, crop production is increasing rather than declining. At the same time, the consumption of mineral fertilizers is constantly increasing. In 1982 the consumption level reached 25 kilograms of primary component per decare, as against 10.2 in the United States, 16.3 in Italy, etc<sup>(1)</sup>. These data show that an analysis and assessment should be made of the agrotechnical and economic effect of applying heavy doses of mineral fertilizers.

If experience in the leading countries over the 1981-1982 period has shown a decrease of 10 percent in the use of mineral fertilizers in terms of primary component, this would correspond to a decrease of 100,000 tons of mineral fertilizers and conventional fuel representing a total value of more than 50 million leva. This represents enormous savings which society could not realize without lowering production. This is proved by comparing the mineral fertilizer consumption for individual crops on the average for the NAIC with the accomplishments of Bulgaria's own leading experience. In 1983, for example, the NAIC consumed approximately 87 kilograms of fertilizer primary component on the average per ton of wheat, as against 51 kilograms for the leading agroindustrial complexes in wheat production.

Much energy is consumed by the fleet of machinery and tractors. Together with a complete set of equipment in one T-130 tractor it is the equivalent of around 75 tons of diesel fuel, more than 65 tons in the K-701 tractor, 44 tons in the T-150K tractor, more than 25 tons each in the E-516 and

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1. "Statisticheski godishnik na NRB--1983" [Statistical Yearbook of the People's Republic of Bulgaria--1983], p 632.

Khersonets-200 grain combines, etc. This is an enormous amount of energy in relation to the total weight of the fixed productive capital, and at the level of extensive use of this capital impedes efficient and profitable development of production.

Direct production is the largest potential source of energy conservation. Its operation is the most decisive factor in determination of the cost price and the profitability of manufactured output. Analyses indicate that energy consumption is increasing rather than declining each year and is not contributing toward making manufactured output less expensive. For example, this consumption rose from 4.94 leva per 100 leva of total agricultural output on the average for the NAPK in 1980 to 5.19 leva in 1982, that is, increased 5 percent. In addition, energy consumption is increasing at a rate faster than aggregate agricultural production. For example, the average annual growth of energy consumption over the 1980-1982 period was 6 percent, while manufactured output rose 3.8 percent. When we learn that energy consumption is increasing at a faster rate than is manufactured agricultural output, we clearly see why the cost price of production is increasing rather than decreasing.

Considerable savings of liquid fuels can be achieved by use of the Bulgarian-Japanese additive Addoil. This is a kerosine containing harmless enzymes which improve combustion, clean combustion chambers, and reduce the amount of noxious substances in exhaust gases. This additive can yield savings of 10 to 15 percent in diesel engine operation, up to 10 percent in use of gasoline-powered vehicles and engines, 3 to 7 percent in firing of furnaces, and so forth.

Appreciable potential for lowering liquid fuel consumption resides in industrial management and technological measures (the system and methods of tilling the soil). For example, fuel consumption is reduced 15 to 20 percent by group work in which the agricultural harvesting technique is applied. Timely maintenance and repair of equipment contribute toward lowering energy consumption as much as 24 percent. Chiselling the soil in place of plowing lowers liquid fuel consumption by 30 to 40 percent, and introduction of minimum tilling reduces such consumption 60 percent<sup>(1)</sup>.

Particular attention must be devoted to proper selection of the machine and tractor assemblies used to carry out mechanized operations. The most energy-efficient assemblies must be selected and used for each kind of mechanized operation. The most energy-efficient tractor for executing deep plowing is the T-150-K, for which 4 percent less diesel fuel is projected over a scheduled itinerary than the K-701 and DT-75M tractors, 24.7 percent less than the K-700 tractor, and 41 percent less than the MTZ-80. With the K-701 tractor about 20 percent less diesel fuel is consumed than with the K-700 tractor, and about 35 percent less than with the MTZ-80 tractor. Consequently, the most energy-efficient tractors for deep plowing are the T-150, K-701, and DT-75M. The most energy-efficient for disk harrowing is

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1. MEKHAHIZATSIYA [Mechanization], No 3, 1983, p 5.

the T-150K tractor, the consumption rating of which is about 11 percent lower than that of the DT-75M, about 23 percent lower than that of the K-700 tractor, and 46 percent lower than that calculated for the MTZ-80 tractor.

Preference should be given to the T-150K, DT-75M, and DT-54 tractors to reduce diesel fuel consumption for planting crops in compact soil. In direct harvesting of wheat and barley, the lowest energy consumption is achieved with the D-106 and SK-5-Niva grain combines, whose consumption ratings are 34 percent lower than that of the E-516 and about 26 percent lower than that of the Kolos grain combines.

The most energy-efficient in harvesting sunflower is the SK-5-Niva grain combine, whose consumption rating is 14 percent lower than that of the D-106, 39 percent lower than the consumption rating of the E-516 grain combine, and about 46 percent lower than the consumption rating of the Kolos grain combine.

The foregoing data show the following to be necessary.

Much care must be devoted to development of the equipment resources of the sectors making up the NAIC. Only those scientific and technical achievements are to be introduced into the sectors making up the NAIC which simultaneously guarantee lower fuel and energy consumption accompanied by higher labor productivity.

The existing equipment resources must be subjected to expert evaluation for the purpose of selecting the most profitable machinery for a given type of operation and activity.

Greater attention must be devoted to the plans and reports connected with use of mechanization for individual types of mechanized operations. Comparative analysis must be made to determine the reasons for consumption in excess of the planned amounts. We believe it to be advisable to institute the practice of performing monthly analyses by individual makes of power machines. The monthly reports recording the type and volume of mechanized operations performed and the fuel consumed should not be authenticated without such analyses.

It is time to introduce in mechanization of agriculture wide-span assemblies which can execute several operations in a single pass of the tractor. This is a reliable means of lowering energy consumption and of improving the physical properties of the soil.

Enormous amounts of commodities are exported within the NAIC system. Optimization of the relationship of the transportation operations carried out with tractors and trucks will create the necessary conditions for lowering liquid fuel consumption. The optimization solutions arrived at in the German Democratic Republic for this problem indicate that, from the national economic and sector viewpoint, tractor transportation is economically justifiable over distances to 5 or 6 kilometers. Beyond this distance it is economically more advisable to use trucks and trailers. The

economic effect of this optimization solution is represented by lowering of transportation costs by about 26 percent<sup>(1)</sup>. Such studies have not been carried out in Bulgaria. Because the terrain is more rugged in our country, it is probable that different figures would be obtained.

High-capacity vehicle structures and bodies have been introduced in recent years and are in use to increase the carrying capacity of vehicles. As a result, the total carrying capacity of vehicles is increased as much as 25 percent, and fuel consumption is reduced 10 to 15 percent<sup>(1)</sup>. Unfortunately, this development is not applied on a large enough scale.

Proper regulation of the air pressure in vehicle tires is a reliable means of reducing fuel consumption as much as 25 percent in transportation<sup>(2)</sup>. Maintaining optimum air pressure in tires requires no capital investment or special equipment.

Integrated crop protection and low-volume spraying are also reliable methods of conserving as much as 20 to 35 percent of fuel consumed<sup>(3)</sup>. These measures have now been instituted over an area of about 3.6 million decares. Wider application of the measures in coming years can lead to considerable conservation of liquid fuels.

Waste materials should be regarded in the NAIC as a substantial potential source of energy. In view of the energy crisis, many countries are using waste materials as energy sources. For example, 1 ton of straw contains an energy potential equivalent to 375 liters (320 kilograms) of fuel oil<sup>(4)</sup>.

The annual electric energy consumption can be lowered 3 to 4 percent by using the biogas resulting from decomposition of stable manure. If at present this measure still cannot be applied on a wide scale, this is due to the fact the energy obtained from the biogas costs more than the electric energy consumed. In addition, there are certain technical difficulties awaiting a competent scientifically valid solution.

Cooling of the milk taken from animals releases heat which can be used as a source for generation of additional amounts of electric energy. Scientific research shows that 1 liter of cooled milk can heat 0.5 to 0.66 liter of water to a temperature as high as 50 degrees Centigrade<sup>(5)</sup>. The milk produced in Bulgaria and the heat released as it cools can heat about 1 billion liters of water, which can be used for household purposes, to this

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1. MEKHANIZATSIYA, No 1, 1984, pp 40-41.

2. MEKHANIZATSIYA, No 2, 1983.

3. MEKHANIZATSIYA, No 3, 1983, pp 6-13.

4. Ibid.

5. Ibid.

temperature (50 degrees Centigrade). More than 35 million kilowatt-hours of electric energy can be conserved for the national economy in this way.

Nor should one underestimate the potential for increased use of solar energy by the vegetable kingdom, and above all by cultivated plants. It is the duty of science to create new forms of plants characterized by appearance, leaf surface, and physiological and photosynthetic activity permitting accumulation of much more organic mass, and accordingly energy per decare, during the growing season determined by Bulgarian climatic conditions, without the need for additional investment to achieve this effect.

To sum up the general measures that can lead to conservation of energy, we may say that in agriculture alone energy consumption can be lowered about 30 percent of the conventional fuel used up to the present. Such savings can be effected throughout the NAIC. It is the duty of everyone to create the conditions necessary for efficient control based on general critical analysis throughout the production process. The analysis should cover the immediate producers of agricultural products, the food and tobacco industry, and the manufacturers and suppliers of means of production, and should end with the ultimate consumers of their products.

Only in this way is it possible to implement the policy of the BCP of lowering the material costs and raising the efficiency of the economy.

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## GERMAN DEMOCRATIC REPUBLIC

### MINISTERS DISCUSS PROSPECTS FOR FUTURE INTRA-GERMAN TRADE

#### Areas of Trade Specified

Duesseldorf HANDELSBLATT in German 5 Sep 84 p 2

[Article by Christa Meyer-Koester: "The Data for Future Trade"]

[Text] Just as was to be noted before in politically complicated situations, it is happening this year also: The trade dialogue is pointedly kept free of political influences. This also or particularly applies to intra-German relations, even after the cancellation of the Honecker visit to the FRG, planned for late September.

GDR Foreign Trade Minister Horst Soelle gave a demonstration to his guest, Dieter von Wuerzen, state secretary at the Bonn Ministry for Economics. He proclaimed good prospects and growth rates for 1985. Quite obviously the GDR authorities are also making an effort to assign trade a continuing stabilizing role by way of projects in third countries.

This is obviously to the liking of the firms engaged in intra-German trade. They are able to note with satisfaction that the GDR will not pursue the constantly stressed consolidation of its balance of trade by means of sharp cut-backs in imports. However--the GDR insists that imports must keep a reasonable ratio to exports. The main trend for the next Five-Year Plan (1986-1990) is quite clear.

In the forefront is the earning of foreign exchange, the next item is sound trade financing and, finally, it is intimated that import needs are to be satisfied to a greater extent than in the past. In the long term we may expect the GDR to acquire more and more modern equipment and products. These are welcome signals, especially for the chemical industry which is strong in intra-German trade, because everything seems to indicate that the expansion of the GDR chemical industry will be a future investment key point.

#### Concentration on Chemicals

It is rumored that about a third of the investment resources available in the coming five-year plan will concentrate on the chemical industry--both for the expansion of satisfactory productions and for new plants.

The GDR has created the proper conditions for being able to realize these plans. It earned a surplus in trade with the West as well as with the East European countries. Debts to the West were perceptibly reduced, deposits with Western banks increased.

According to the Bank for International Settlements, GDR deposits now amount to \$3.8 billion. Total debts are estimated at slightly more than \$10 billion. Even if we compare the present situation just with last year's autumn fair, the estimates of the GDR's international creditworthiness have taken a virtual 90 degree turn.

Financing for a GDR transaction is no longer a problem. On the contrary, it is reported that more loans are offered than needed. Competition is once again strong for decimal points of margins on the factoring market. That applies most of all to the "fat morsels" of chemical and steel transactions.

In the second half 1984, the GDR will expand its purchases from the FRG "quite considerably." This was State Secretary Dieter von Wuerzen's statement after his traditional talk with GDR Foreign Trade Minister Horst Soelle on the occasion of the Leipzig Autumn Fair.

Von Wuerzen said the GDR minister had promised to equalize the imbalance that had arisen in the first half. At the same time he had warned against any undue dramatization of short-term fluctuations in intra-German trade.

We already have the evidence of some figures that the GDR is serious about its proclaimed intentions. When we look at only that plant with a delivery value of DM10 million or more in the sector machines and electrical engineering, we note that GDR orders in the first half 1984 were only around 60 million clearing units (1 VE [clearing unit] equals DM1).

In the first months of the second half, orders for investment goods in these dimensions already amounted to 180 million VE. They involved one ethene plant (60 million VE/Salzgitter), one chemical fiber plant (55 million VE; several firms are participating), 30 special rail cars (22 million VE/Waggon-Union), a wire pickling plant (20 million VE) and the construction of a factory for graphite electrodes to be supplied by Voest and Kloeckner (the FRG's share 12 million VE).

#### Growth Rates to Climb

The GDR foreign trade minister mentioned to the Bonn state secretary an "inquiry volume" amounting to 17 billion VE. Admittedly, von Wuerzen said, this amount would be hedged with some reservations. At the same time Soelle pointed out that trade with the FRG would steadily progress in 1985 also. He assumed that growth rates would be above those of 1983 and 1984. The GDR will emphasize replacement parts and equipment for environmental control (flue gas desulfurization) with respect to its purchases in the FRG.

Already in the first 6 months of 1984, the GDR purchased clothing worth 9 million VE in intra-German trade. It has now held out the prospect of further orders amounting to more than 10 million VE. More contracts have also been concluded in the chemical and steel industries.

In 1979 an agreement stipulated that the GDR would purchase hard coal to a value of 250 million VE per annum through the end of 1985. In the first half of this year it bought merely 20 million VE's worth hard coal. Coal purchases had in fact already dropped sharply in 1983, achieving only 44 million VE. However, at that time they were compensated by increased steel purchases. Von Wuerzen said that Soelle had again promised some compensation.

Generally there has been no exacerbation in the practice of reciprocity business. However, small and medium-size firms are complaining about greater difficulties with respect to payment terms.

According to GDR records, third country projects with a total value of 1.8 billion VE are now at the discussion stage.

#### Improved Trade Conditions

Duesseldorf HANDELSBLATT in German 4 Sep 84 p 1

[Text] There are indications at the Leipzig Autumn Fair, that the delivery opportunities for FRG firms will improve in the last few months of this year.

That, at least, is the opinion of the German Industrial and Trade Association (DIHT). Satisfactory prospects are suggested in particular for some consumer goods industries, the chemical industry and also iron and steel. Admittedly, Dr Helmut Gieseke, head of the foreign trade section at the DIHT, said that the record results of the first half 1983, when FRG deliveries rose by 33 percent, are unlikely to be repeated. He described it as a welcome phenomenon that the GDR is now obviously spreading its orders more widely, including small and medium-size firms more than in the past, especially with respect to essential and nonessential foods, textiles and clothing, iron and steel.

The DIHT also believes to perceive some indications that opportunities are again improving in some capital goods sectors. Following some orders for textile machines, the producers of printing machines and machines for plastics processing are now also talking of promising negotiations. No revival seems indicated as yet with regard to chemical plant construction, medical and laboratory equipment.

As was emphasized repeatedly before the Fair, all orders to be placed by the GDR now relate to the urgently necessary modernization of the GDR's industry. The suppliers of specialty equipment therefore believe they may have a real opportunity here. Despite the high development standard of GDR textile and printing machine construction, for example, FRG firms in these branches are achieving satisfactory sales. Opportunities for cooperation may also arise in precisely these sectors.



West German buyers, particularly from the consumer goods sector, continue to be interested in purchases from the GDR, especially because GDR suppliers are signaling greater flexibility and the willingness to adapt to Western standards. Furthermore, higher prices on East Asian markets also have some effect in this matter. The GDR will therefore be able to further raise its deliveries, although it is assumed that the delivery surplus earned in the first half will decline slightly.

The working party "trade with the GDR" in West Berlin reports that the order stock for deliveries to the GDR at end July was 17 percent below the level of last year, while purchases were 13 percent higher. Particularly strong was the drop in orders in those branches that had experienced a boom in 1983. The steel industry recorded a 46 percent decline, the investment goods sector 26 percent and nonferrous metals 16 percent.

11698

CSO: 2300/153

GERMAN DEMOCRATIC REPUBLIC

FRG ECONOMIST CITES POSITIVE INTRA-GERMAN TRADE DEVELOPMENT

East Berlin NEUES DEUTSCHLAND in German 17-18 Nov 84 p 2

[Report of interview with Otto Wolff von Amerongen, president of German Industrial and Trade Association (DIHT) by ADN, Cologne, date not cited]

[Text] In an interview with Ralf Bachmann, ADN correspondent in Bonn, Otto Wolff von Amerongen, president of the German Industrial and Trade Association, stated that "trade between the two German states has well developed in recent years, for the benefit of both parties." GDR deliveries, especially, had increased. The GDR had intelligently used market conditions in the FRG where, due to the high dollar rate, imports from the countries in the dollar region had become more expensive. At the same time the quality of products offered by the GDR had perceptibly improved.

Economic relations had certainly helped achieve relations between the GDR and the FRG to generally progress smoothly, despite the change of government in Bonn, and that these relations had not troubled the international political climate. "I have always held the opinion that our economic relations represent part of the bridging function between East and West, which is needed permanently," the industrialist emphasized.

He thought that we should be quite satisfied with the fact that the situation in Central Europe was not worse. "I believe we should in any case actively pursue good neighborly relations."

In his view there were still many unused opportunities for economic relations between the two German states. "We are both highly industrialized countries with a high technical standard. However, this is not reflected in our mutual trade in capital goods, compared with the same trade between the GDR and the Soviet Union, for example, or between our country and France," Wolff noted. A step in the right direction in this sector was the contract signed last Monday between GDR foreign trade enterprises and the Volkswagenwerk. This also provided an example of enterprise oriented cooperation.

He noted more reserves in joint ventures on third markets and the even greater involvement of medium sized enterprises in trade with the GDR, because such enterprises accounted for 60 percent of FRG industrial output.

Wolff added that "the exchange of goods with the Soviet Union is similar in volume to trade with the GDR." The socialist countries' overall share in FRG foreign trade amounted to 7.2 percent. Economic relations with the USSR were of particular importance for the FRG. The Soviet Union was an enormous country, and its national economy very well complemented that of the FRG in many sectors. This did not apply only to the development of the immense USSR energy resources but also for the Soviet Union's considerable projects for the modernization of its industry, in which the FRG would like to participate. Efforts were being made for an expansion of enterprise cooperation with the USSR, too.

At the conclusion of the interview, Otto Wolff von Amerongen confirmed his reservations with regard to U.S. efforts to expand the embargo lists for trade with the socialist countries. Of course military equipment needed to be excluded from trade with the East. This was not even disputed by the CEMA countries.

"Still, I remember all too well the American objections against the natural gas pipe business between the Soviet Union and West European countries," the DIHT president said. "In view of actual developments, these are merely ridiculous now and no longer upheld even by their authors."

It would definitely be unacceptable if embargo demands were to be used to try and obstruct East-West trade for political reasons or for carrying political objectives. At times the impression arose that possible competition was the real reason why modern equipment should not be supplied to Western European countries with the argument that they might be passed on "to the East."

11698

CSO: 2300/153

GERMAN DEMOCRATIC REPUBLIC

AGRICULTURAL RESEARCH COOPERATION, 35-YEAR ACHIEVEMENT CITED

East Berlin FELDWIRTSCHAFT in German Vol 25, No 10, Oct 84 pp 429-431

[Article by Prof Dr Erich Ruebensam, SED member, President of the Academy of Agricultural Sciences of the GDR: "The Contribution of Agricultural Science to the Development of the GDR"]

[Text] Thirty five years of the GDR are likewise 35 years of successful work of the agrarian scientists for the good of the people and for peace and socialism.

The work of the agrarian scientists is inseparably linked with the emergence, development and growth of our state of workers and farmers.

Of truly historical dimensions are the revolutionary upheavals that have been carried out since the establishment of the power of the workers and farmers under the leadership of the SED and in inseparable alliance with the USSR and the other countries of the socialist community. Today the GDR is a modern socialist industrial country with developed agriculture, a country that distinguishes itself through political stability, a dynamic economy, and the continuous pursuit of the unity of economic and social policy for the good of the people, a state that has the material and intellectual power to meet successfully the growing demands of the 1980's.

"Great things were achieved in agriculture. There were more changes in the villages in 35 years than in previous centuries."\*

In putting into practice the Marxist-Leninist agrarian and alliance policies of the SED, stronger socialist production relations developed in our republic's agriculture, continuously supported by the working class. The LPG [agricultural producer cooperatives] proved to be efficient basic forms of agricultural production. The uniform class of cooperative farmers developed, highly educated and loyally devoted to socialism. It is the main producer of agricultural products and operates in close alliance with the leading working class. Through the unfolding of cooperative democracy and the development of cooperation, substantial reserves were opened up and the efficiency of our agriculture was raised.

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\* Proclamation of the SED Central Committee, the GDR state council, the GDR Council of Ministers and the National Council of the GDR National Front on the 35th anniversary of the founding of the GDR, NEUES DEUTSCHLAND, 21 January 1984.

In the LPG's, VEG's [state farms] and their cooperative installations, production was increased through intensification and thus the basis was established for a more secure supplying of the population with foodstuffs and of industry with agrarian raw materials.

For more than a decade, the growing consumption of foodstuffs has largely been met through the production of our republic's own agriculture. Additionally required feedstuffs and some types of fruit, vegetables and raw foodstuffs as well as tropical fruits were imported.

In the case of plant products, there has been an especially significant increase in grain production in the past 35 years. Whereas the 1949 harvest was 18.1 dt [1 dt = 100 kg], in 1982 and 1983 the LPG's and VEG's achieved yields of 39.8 and 39.6 dt, respectively. This year it was possible to attain the highest yield yet of about 43 dt per hectare. For the first time in the history of our republic, the harvest was more than 10 million tons of grain in each of the named years.

Relative to 1949, the market production of slaughter cattle, milk and eggs multiplied several times over. Thus the preconditions were established for meeting the increased per-capita consumption from 1950 through 1983 of from 22.1 kg to 92.1 kg for meat and meat products, from 5.4 kg to 15.7 kg for butter, and from 63.1 to 301 eggs.

With the continuous development of its potential and with its research results, agricultural science created important preconditions for this successful development. New knowledge, varieties and developments, arising in the close teamwork of the scientists of our academy with the agricultural scientists of the universities, colleges, other academies and research installations, promoted the revolutionary transformation of agriculture, the development of productive forces as well as the significant increase in production and labor productivity. In this process, an ever-closer cooperation of science and production materialized in multiple forms corresponding to the specific conditions of each case, and scientific knowledge combined with the experiences and bright ideas of the cooperative farmers and workers. More and more, agricultural science became a direct productive force.

#### Plant Production Research

We have always let ourselves be guided by the fact that increased hectare yields are and remain the pivotal point for the increase in agricultural output. That is why agrarian research has always paid special attention to the problems of the conservation and improvement of soil fertility, for the soil is, after all, the main means of production in agriculture and a continuously reproducible source of raw materials.

Soil fertility is above all decisive for the size and stability of the yields of plant production and, through the fodder yields, for output in livestock as well. There are multiple interrelationships between soil, plants and animals whose optimum configuration is a priority task in increasing plant and animal production. Essential findings and results of research in soil

fertility have been brought together in the complex procedures for rebuilding soil fertility that have been successfully tested in practice. They are an important foundation for the variety-related maximum yield concepts in the LPG's, VEG's and cooperative installations.

With the computer projects for calculating fertilizer recommendations, for maintaining a file on varieties, and for consultation on sprinkler irrigation, large-scale scientific findings are just as effective in practice as in the diverse measures of the cooperative farmers and workers for irrigation and drainage and reciprocal water regulation in the areas used in agriculture.

An important contribution to increasing yields in plant production and in raising their supply effectiveness has been made by research in plant protection, whose results are becoming effective through agrotechnical and other agricultural measures as well as through the development and application of chemical plant-protection agents. The preservation of healthy stands of plants and the reduction of losses caused by diseases and pests have made a substantial contribution to increasing and stabilizing yields. With the computer-supported uniform monitoring system, which has found international recognition, agricultural research has created a means that makes it possible to apply in practice specific control measures that are very effective and economically efficient.

Plant improvement, including research therein, has played a major role in the development of the yields, especially grain yields, in plant production in the past 35 years. In the socialist teamwork of installations of our academy, the VVB [association of state enterprises] Seed and Seedlings, and the universities, as well as in cooperation with the agricultural scientists of fraternal socialist countries, about 620 varieties of agricultural and garden crops were created. Included are about 90 new grain varieties that distinguish themselves through better characteristics in regard to yield size, resistance, quality, stability and suitability for mowing and threshing. The important progress in plant improvement was emphasized through such varieties as the winter wheat varieties "Alcedo," "Compal," "Arkos," and "Miras," the winter barley varieties "Erfä," "Leuta," and "Borwina," the winter rye varieties "Janos" and "Pluto," and the summer barley varieties "Trumpf," "Grit" and "Salome."

Also to be pointed out are the economically and scientifically highly rated results in accelerating progress in plant improvement, through which it was possible to reduce the breeding time of from 15 to 20 years down to 10 to 12 years.

#### Research in Livestock Production

In the past three and a half decades, significant work was performed in the area of research in livestock production that had a decisive influence on the increase in output of livestock production and contributed to ensuring the high level of supply of the population with products of animal origin. Representative for many here are the results developed in the teamwork of the academy with sections of the universities, the VVB Livestock Breeding and experts,

on the basis of which the rebreeding process of the black-variegated milk cow was begun in 1970 and successfully continued.

A system of biotechnological procedures was fully developed for controlling reproduction in swine production.

Scientific findings in livestock feeding, especially in the energy evaluation of fodder as well as in the metabolism of protein and amino acids, were the basis for new feeding regimes and contributed to improving the economy of feed operations. Research in veterinary medicine has developed, tested and made available about 100 compounds for preserving animal health, especially for preventing and controlling animal epidemics. That made a significant contribution to the virtual eradication of some previously devastating animal epidemics.

#### Bases for Increasing Labor Productivity

In the past three and a half decades, in accordance with the requirements of the development of society and productive forces, agricultural scientists in close cooperation with their partners in industry and agriculture have developed or perfected several generations of production processes. The intensively expanded reproduction of agriculture took place in the inseparable reciprocal interaction of the development of processes and the use of such new means of production as, for example, more efficient equipment and more effective chemical products.

The new process solutions, the increased yields, and the significant increase in the level of skills of cooperative farmers and workers were the basis for the substantial increase in the labor productivity in the LPG's, VEG's and cooperative installations. Whereas in the 1950's the production of 1 dt of grain in individual rural enterprises required an expenditure of 6 to 7 hours of working time and the production of a dt of potatoes and sugar beets required 4 to 5 hours, today the LPG's and VEG's produce a dt of grain with an effort of 12 to 15 minutes and a dt of potatoes and sugar beets in 18 to 24 minutes.

It was thus possible to bring about the substantial increase in agricultural production with a decline in the number of workers of more than 60 percent.

In the 1980's, a further increase in labor productivity is to be achieved with no change in the size of the labor force. The planned increase in output is to be secured through a noticeable improvement in the relationship between expenditures and results.

The new stage in the realization of the economic strategy decided by the 10th SED Congress requires an acceleration of scientific-technical progress and a significant increase in its economic utilization. "Progress in the further intensification of our agriculture thereby largely depends upon also having agricultural scientists and their cooperative partners achieve peak performance more rapidly and introduce these new results of high economic benefit into practice as soon as possible." \*

\* From the Politburo report to the Seventh Session of the SED Central Committee. Reporter: Gen Werner Feife, Dietz Publishing House, Berlin, 1983, pp 37-38.

## Many-Sided Scientific Cooperation

The increasingly complex nature of social reality thereby necessitates stronger interdisciplinary work. The more successful one is in taking into account the complexity of biological and economic conformance to principle in agriculture and in investigating the questions of intensification under scientific, technological and economic aspects, the more successful one will also be in realizing the basic orientation linked with the long-term program of agricultural research, especially in achieving more peak performance and greater economic effectiveness. The further extension of cooperation with the Academy of Sciences, the Academy of Architecture, the universities and colleges, the industrial combines, and the agricultural equipment enterprises will also contribute to this. The heightened development of international socialist scientific cooperation, especially with the USSR and the other CEMA countries, will open up additional opportunities for accelerated scientific-technical development for the benefit of all. Cooperation in research is of great importance for a high theoretical level and great effectiveness of agricultural research in practice. The better that basic research and applied research work together thereby, the more rapidly and the more effectively can well-founded results be put into practice with great effect. That is especially true for such promising areas as microelectronics, information processing, and biotechnology.

## New and Demanding Tasks

Our republic's agricultural scientists have equally important political and economic tasks to solve. Here I would like to point out the improvement and further development of the scientific bases for a substantial increase in our own yield of grain and other plant products, through which imports of grain and feedstuffs are to be reduced. At the same time, the preconditions are to be created for the further increase in livestock efficiency. To give a comprehensive character to intensification, as called for by the seventh and eighth sessions of the SED Central Committee, requires even deeper involvement in the operations of the LPG's and VEG's, a further development of cooperation, and the rapid practical development of scientific solutions for the effective formation of the uniform reproduction process of plant and livestock production. Necessary is the development and general introduction of those production processes that make even better use of the inherent biological laws of agricultural production in their agricultural, technical and technological bases for improving yields and output, that make possible the efficient use of energy sources and other material funds and thus make a significant contribution to improving the input-output ratio.

Thus we face new and demanding tasks and growing demands on the performance and level of agricultural research. We face up to these demands, for we know that they originate in the policy of the SED directed toward ensuring peace and the well-being of the people, a policy that is also reflected in the comprehensive support of the agricultural sciences in our republic.

Today we have tremendous potential in the agricultural sciences, and we have capable researchers and experienced people as well as up-to-date research technology. The capability of agricultural research will be further increased



through the correct application and efficient use of what we have and by continuing to concentrate our efforts and resources on the crucial focal points and promising directions.

Supported by the awareness that important scientific and economic achievements strengthen socialism and make peace more secure, the people working in our republic's agricultural science installations are struggling together in socialist competition with their partners in science and in practice to fulfill and exceed the planned tasks for 1984. This will be their contribution toward making the 35th year the most successful yet in the history of the GDR.

9746

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GERMAN DEMOCRATIC REPUBLIC

CARBON CHEMICALS CREATED BY COAL LIQUEFACTION, GASIFICATION

East Berlin WOCHENPOST in German 3 Aug 84 p 8

[Article by Michael Rehse: "Does the Future Belong to the C-1?"]

[Text] At present "carbochemists" (carbo = coal in Latin) in many countries over the world are attempting to produce the greatest number of products from the least amount of coal possible. Even back in the 1920's a couple ways were found to make the raw material available to the chemical industry. Today the problem is to make the processing of the black gold profitable through the improvement of the known processes using modern technology. This was stated by Professor Siegfried Nowak in his presentation in honor of this year's Leibniz Conference given by the Academy of Sciences of the GDR.

When chemists speak of coal, they always mean only the large carbon molecules of complex composition contained in it. With coal liquifaction it is understood that these molecules are cleaved and hydrogenated. This is carried out with high temperatures and pressures as well as by means of certain catalysts. Which pressure, which temperature, and how much hydrogen is needed, is tested out in experimental units the world over. In the pilot plants in the Soviet Kansk-Achinsk Region, where billions of tons of lignite are deposited, the object is not, for example, primarily to obtain end products such as gasoline or diesel fuel but to derive technical threshold values.

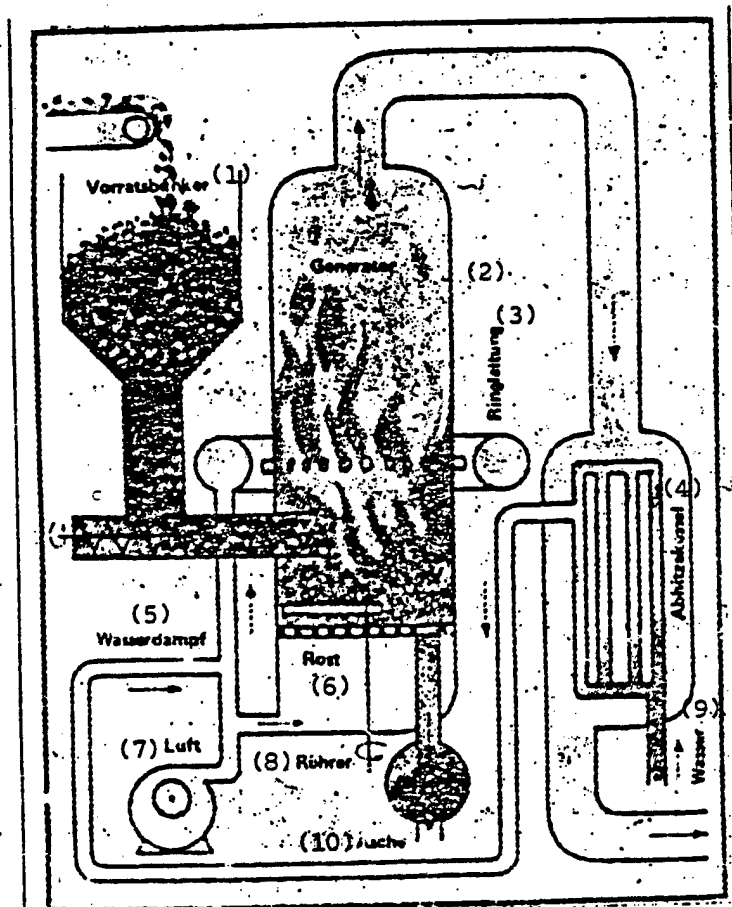
The first goal of coal liquifaction, as reported by Dr Alexander Dokukin, Director of the A.A. Skochinski Mining Institute of the Soviet Academy of Sciences, is coal oil, an intermediate product, composed of heavy oil (heavy heating oil) and medium oil (light heating oil and diesel fuel), a little light oil (gasoline) as well as the hydrocarbon gases propane, ethane, and methane. Then the desired end products can be produced from the intermediate product.

Not every type of coal is equally good for liquefaction. The hydrogenation is influenced not only by the structure of the coal but also by its composition, particularly by its content of mineral components. And this varies greatly from coal deposit to coal deposit and even within a deposit. The coal of Kansk-Achinsk contains only few impurities. This makes it possible to obtain a ton of fuel from four tons of coal. The amount of energy needed

for this is of course very great; thus scientists and experts are still experimenting in order, for example, to find new technological modifications by means of better catalysts.

Along with liquifaction is coal gasification, the second path being followed by "carbochemists." In this case the large molecules of coal are then completely broken down in order to obtain synthesis gas. This consists of carbon monoxide (CO) and hydrogen (H<sub>2</sub>). According to the process used, besides hydrocarbons, for example, methane (CH<sub>4</sub>) and carbon dioxide (CO<sub>2</sub>) are obtained.

The classical process is the gasification of coal in the Winkler generator, which in improved form is still being constructed even today. In modern units the coal is not gasified lying upon a grate but in a fluidized bed. The resulting gas mixture is the starting point for various syntheses. A high degree of development was reached by the process for methanol, which is one of the basic products for the synthetic chemicals industry.



- |                      |              |                      |
|----------------------|--------------|----------------------|
| Key: 1. Holding bin  | 2. Generator | 3. Circular pipeline |
| 4. Waste heat boiler | 5. Steam     | 6. Grate             |
| 7. Air               | 8. Stirrer   | 9. Water             |
| 10. Ash              |              |                      |

Although research and development of coal liquifaction and gasification are being carried out equally intensively, according to experts' reports the so-called C-1 chemistry, a chemistry based on synthesis gas and methanol offers the greatest opportunities for the immediate future. This applies above all, according to Professor Nowak, to the GDR. The scientist based this statement on the opinion that the production of methanol from synthesis gas belongs to the large-scale, established processes of the GDR chemical industry.

12446

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GERMAN DEMOCRATIC REPUBLIC

FUEL, BASIC SUBSTANCES SYNTHESIZED THROUGH COAL LIQUEFACTION

East Berlin SPEKTRUM in German Vol 15, No 9, Sep 84 pp 5-8

[Article by Prof Dr Siegfried Nowak, CC SED member, Director of the Central Institute for Organic Chemistry: "Reliable and New/Methods/ in Carbochemistry"]

[Text] An increasing need for organic raw materials for the production of energy as well as starting and intermediate products for the chemical syntheses necessitates in the case of constant or even reduced petroleum production a new strategy for the use of petroleum production and our domestic lignite. During the Leibniz Conference the author informs us of the international trends and contributions of "carbochemistry" [the conversion of coal into carbon-based chemicals] to the solution of these problems.

Providing for the need of raw materials and fuel based upon fossil carbonaceous substances is of decisive importance for the stable development of our economy. Petroleum, natural gas, and coal have a double function. They are first of all starting materials for useful, particularly electrical, energy, heat, and cooking gas and at the same time the basis for the production of fuels and chemical products. On an international scale about 90 percent of the petroleum produced today is burned, of which about half in the form of heating oil and 40 percent as light, diesel, and jet fuels. Only a tenth of the petroleum is used for the production of chemical products, such as organic starting materials, intermediate products, plastics, elastomers, monomers for fibers, dyes and surfactants. The GDR assumes a peak position in the world with a 14 percent portion being used for its manufacturing of materials.

The world reserves of fossil carbon compounds calculated as coal equivalents of about 860 billion tons consist of about three-quarters coal, up to 16 percent petroleum, and up to 11 percent gas. With an international view we see that in the case of petroleum precisely there where the greatest need is, that is where the smallest reserves are available. Accordingly, only about a thousandth of the technically obtainable coal reserves are produced annually, while in the case of petroleum this value comes to about a hundredth of the reserves. The shortage of petroleum and petroleum products, as well

as the well-known rise of the price level, have not only led to a worldwide reevaluation of petroleum and coal but also to an introduction of a structural change in their processing.

While at the end of the 1950's our organic chemical industry based upon raw materials from tar and coal switched over to the less expensive petroleum in order to satisfy better the growing need for fuels and organic raw materials, at present we are again facing a structural change with regard to the use of organic raw materials. This is accomplished, however, in contrast to the 1950's, on a significantly higher scientific-technical level and means neither quantitatively nor qualitatively a simple return to the classical coal refining.

For the chemical industry of our republic this means: further improvement of the decreased oil refining and an increase in the degree of utilization of the materials potential of the imported petroleum. This also means the processing of the high-boiling petroleum fractions and petroleum residues, that were heretofore used as heating oil, into fuels and chemical products. Since the availability of heating oil was reduced as a result of the lowering of oil production, the present and future energy needs must be filled by coal or natural gas, respectively, and as soon as possible gradually by nuclear energy. Disregarding the dominant position of petroleum for the production of fuels and chemical products, in the future coal also can make an even greater contribution to the chemical industry.

#### Coal - Raw Material for Chemical Industry

Problems from the utilization of petroleum and coal for the production of fuels and chemicals are derived mainly from the different chemical and physical characteristics of the two raw materials. While petroleum crudes from various wells differ significantly only through varying proportions of their constituents, such as paraffins, naphthenes, aromatics, coal consists of an unusual variety of mineral types which show considerable fluctuations not only from one coal seam to another but even within a single deposit, and their utilization and processing is greatly affected

Serious structural differences also exist between coal and lignite. While the carbon in coal is present in the form of condensed aromatic rings, lignite is characterized by a simple lignite structure and also by a high oxygen content which can reach as high as 30 percent. Coal can then replace petroleum if with the addition of hydrogen the chemical structure of the coal goes through a fundamental transformation and is broken down into smaller fragments.

In addition, lignite possesses a high water content, that can come to two-thirds of the full weight of the crude lignite. These structural differences influence to a high degree the character and the composition of the reaction products from its conversion. While for example the liquifaction of coal yields high octane gasoline but inferior diesel fuel, as a result of the lesser aromatic character of lignite, its liquifaction yields along with gasoline a qualitatively superior diesel oil.

## Gasoline and Raw Materials from Coal

The carbochemical paths in this direction are in principle not new. Some processes reached large-scale development back in the mid-1920's and were the basis for the development of the organic chemical industry. Processes for the refining of coal, which were retained here by decisions of the party and government even during the petroleum euphoria, are directed toward producing tars, paraffins, electrode carbon, light oils, and gasoline. In addition, a series of additional hydrocarbons, such as aromatics, phenols, or heterocycles, respectively, are produced.

At present the task is to stabilize these carbochemical processes, to simplify them, and to make them more economical. With the long-planned reconstruction of the carbonizing plant in Espenhain, the increase of the LHT [Lignite High Temperature] coking capacity in the Lausitz District and an increased materials-efficient utilization of the products thus obtained, this comprehensive reconstruction process was successfully begun.

The development of processes for the gasification or liquefaction, respectively, of coal in various countries is determined primarily by the end products to be produced but also by the coal quality and its composition, the scientific-technological know-how, and the materials and technological guarantee of the investments. While coal liquefaction is oriented chiefly toward the production of fuels, chemicals are obtained preferably through coal gasification to synthesis gas ( $\text{CO}/\text{H}_2$ ) and then followed by syntheses. The gasification to a great extent offers no problems with all types of coal as well as even with salty coal; not every coal, however, can be equally well liquified by hydrogenation. The capacity for hydrogenation is influenced by the structure of the coal, especially, however, by its mineral constituents as well as by hetero-elements.

While the state of modern gasification technology has reached large-scale commercialization internationally and even in the GDR, in the case of coal hydrogenation new practical knowledge above the state of hydrogenation technology coming to us from the time of World War II is found only in the pilot plants. This means that the whole process and certain steps, for example, the solid-liquid separation and the efficient utilization of the hydrogen, are still to be significantly improved and made technically reliable.

Although research and development efforts are being applied equally in both directions, the greatest opportunities in the immediate future for the production of the products previously based on petroleum by chemical industry are being made available to the so-called  $\text{C}_1$  chemistry, a chemistry based upon synthesis gas and methanol. With regard to materials, this statement is based above all upon the fact that obtaining methanol from synthesis gas belongs to the large-scale, established processes of chemical industry and that methanol provides for manifold chemical and microbiological syntheses as well as for the replacement of gasoline.

## Coal Liquefaction

According to the general conception, coal liquefaction is a thermocatalytic degradation of the macromolecules of coal in the presence of catalysts at temperatures of between 450 and 480°C and pressures of 300 atm to liquid hydrocarbons and gaseous compounds. The goal of the research above all is finding milder process conditions through the use of the proper hydrogen donors and improved catalysts. With this a pressure reduction of about 100 atm and the preparation or the processing, respectively, for the hydrogenation or gasification is sought in order to increase the yield of liquid reaction products, to reduce the hydrogen demand, and to simplify the technological design of the process, particularly the solid-liquid separation.

The following processing scheme is the result: the coal is classified, milled, and subjected to drying before it is mixed with a so-called "mashing oil," and then pumped into the preheater. From there it is introduced into the hydrogen already present in the reactor, where the degradation to liquid products, gases, and an ash-containing residue takes place. The resulting liquid products are separated and transferred to an additional catalytic cracking process to yield high octane gasoline and diesel fuel. In addition the medium coal oil can be used after the proper catalytic treatment also as the crude product for basic organic materials (olefins and aromatic hydrocarbons). The remaining residue is treated with water to yield hydrogen, which is then returned to the hydrogenation process.

The degree of coal transformation as well as the composition of the resulting gaseous and liquid reaction products is determined preferably by the process parameters: pressure, temperature, contact time, and the hydrogen introduced into the coal; they also depend, however, to a high degree on the quality of the coal and the pretreatment of the coal.

## Coal Gasification

Coal gasification is understood to mean the reaction of lignite or coal at temperatures above 1,000°C with steam, air, and/or oxygen to yield predominantly gaseous products and a residue of ash. Depending upon the applied gasification process (such as solid bed or fluid bed or in the flue-dust cloud, respectively), the means of gasification, and the process conditions (such as temperature and pressure), a gaseous mixture of varying composition consisting of hydrogen, carbon monoxide, methane, and carbon dioxide is obtained that is further processed and used

- as synthesis gas for the production of chemical products
- for obtaining hydrogen
- as a synthetic gas for heating purposes or also
- as reducing gas in the metallurgical industry.

While coal gasification for many years had as an objective to provide hydrogen or city gas, at present the production of synthesis gas (a mixture of carbon monoxide and hydrogen) is gaining importance in the production of chemical products.



## Prospects For the C<sub>1</sub> Chemistry

The C<sub>1</sub> chemistry--in recent years internationally a special area of concentration for research and development in many countries--is based on synthesis gas and methanol. The relatively easy access to this basic material from various fossil carbon-based materials such as natural gas, petroleum, as well as lignite and coal, and their large-scale production raises expectations that the entry into carbochemistry along this pathway can be economically carried out most favorably and most quickly.

It can be stated fundamentally that the majority of key products based on petroleum in principle can be obtained as well from synthesis gas or methanol, respectively. The state of development attained for the individual products varies greatly, however, while a whole series of syntheses are being carried out on a large scale for many years, many reactions are still in a stage of basic research into the chemical reaction. Examples of the large-scale syntheses based on synthesis gas or methanol, respectively are the production of methanol itself, of hydrogen, ammonia, formaldehyde, urea, the production of amines, which serve in the GDR for many years as the foundation for the manufacture of such traditional products as plastics, fertilizers, adhesives, and other end products.

Among the syntheses which have reached large scale status just in the last few years belong the production of the higher alcohols, the synthesis of acetic acid, acetic anhydride, the production of anti-knock components of vehicular fuels, and the protein synthesis based on methanol. Many syntheses are still in the stage of basic investigation. Despite intensive research and development efforts and a high potential for application in many countries worldwide, the level reached for some reactions regarding selectivity, space-time yield, the use of extreme reaction conditions, and the frequently necessary use of expensive catalysts containing noble metals cannot compete with petrochemical syntheses when compared economically and are not satisfactory.

## Products Containing Oxygen

Those reactions are efficient that retain completely in the end product the oxygen and the carbon of the starting material--as in the case of the synthesis of alcohols and acetic acid--and do not result in the formation of water. The production of oxygen-containing intermediate products (alcohols, acids, glycols) is always more efficient than the production of ethylene, aromatic hydrocarbons, or even vehicular fuels since their synthesis is associated with an undesirable production of water. While for a ton of ethylene glycol, a typical ethylene end product, the theoretical raw material requirement lies around 1.56 tons, that for the synthesis of ethylene 4.15 tons of synthesis gas. If the present yields achieved in practice for this reaction is taken as a basis, then for one ton of ethylene we must use ten tons of synthesis gas.

The most attractive way to produce oxygen-containing products is without doubt the direct catalytic conversion of synthesis gas in one step. The

disadvantage of this path is, however, that such direct syntheses are not selective because of the reaction mechanism; this means that a large quantity of reaction products forms that requires wasteful separatory processes and influences negatively the economics of the synthesis.

#### Methanol Replaces Petroleum Products

Most of the products named here can be obtained significantly more favorably, that is with more selectivity and in good yield, starting with methanol, which today is being produced economically on a large scale from synthesis gas. Since the first large-scale production in 1923 in the Leuna Works from an organic intermediate product, methanol has developed into a raw material for a variety of new chemical syntheses. From the planned volume of production methanol on the long term could achieve fully the importance of the lower olefins for chemical industry.

Since in particular the constantly increasing need for vehicular fuels strongly affects the petroleum deficit, there are on an international scale very intensive efforts to produce fuels increasingly on the basis of carbochemical raw materials. In addition to the previously mentioned liquefaction of coal through catalytic, high pressure hydrogenation relief for the vehicular fuel sector is expected through the conversion of or the use of methanol, respectively, as gasoline.

Here two developments stand out significantly: the conversion of methanol with new types of silicon-containing molecular sieve catalysts into high octane gasoline and the direct mixing of methanol with gasoline and diesel oil fractions. Both directions offer good chances to relieve the petroleum deficit although both paths lead to disadvantages as well as advantages.

The production of high octane fuels from methanol, a process developed by the Mobil Oil Company, USA, is plagued with some crucial disadvantages. For stoichiometric reasons theoretically only 44 percent hydrocarbon can be obtained from methanol. The balance of the methanol used is unavoidably recovered as water so that for each ton of gasoline about three tons of methanol must be used. An additional defect of the process so far tested only in pilot plants is that this reaction generates a large amount of heat, whose removal requires wasteful technological solutions. Despite its disadvantages this reaction is being researched very intensively all over the world because it offers the possibility of producing high octane fuels through carbochemistry which can be used by existing vehicles without problems. Apparently, strategic questions also play no small role with the realization of this alternative.

The other way to use the high octane methanol as gasoline provides for the direct admixture with gasoline in certain proportions. The best known internationally are the so-called M-5 and M-15 technologies, that is mixed fuels containing along with gasoline fractions five or 15 percent methanol, respectively. This alternative in contrast to the catalytic conversion of methanol into vehicular fuel undoubtedly has energy and economic advantages. While the formulation of the M-5 alternative is considered safe to a great

extent in the presence of gasoline components rich in aromatics, for the reason, however, that it can replace only a small number of gasoline fractions, the introduction of the M-15 technology requires the solution to some problems.

The use of gasoline-methanol mixtures necessitates alterations in the vehicle. This applies in particular to their being altered and equipped with methanol-resistant seals and hoses and those parts that come into contact with the fuel. The development of suitable materials and their incorporation into existing vehicles are thus a fundamental prerequisite for the introduction of mixed fuels.

An additional problem comes from the fact that gasoline-methanol mixtures do not have a long shelf-life and depending upon the duration of storage and ambient temperature they separate out. Through the investment of adding a definite amount of higher alcohols, such as for example ethanol, propanol, the separation is inhibited. That requires, however, an additional investment in the production of such solution aids. That is also one of the reasons why the production of such alcoholic mixtures from synthesis gas belongs to the focus of international research and development.

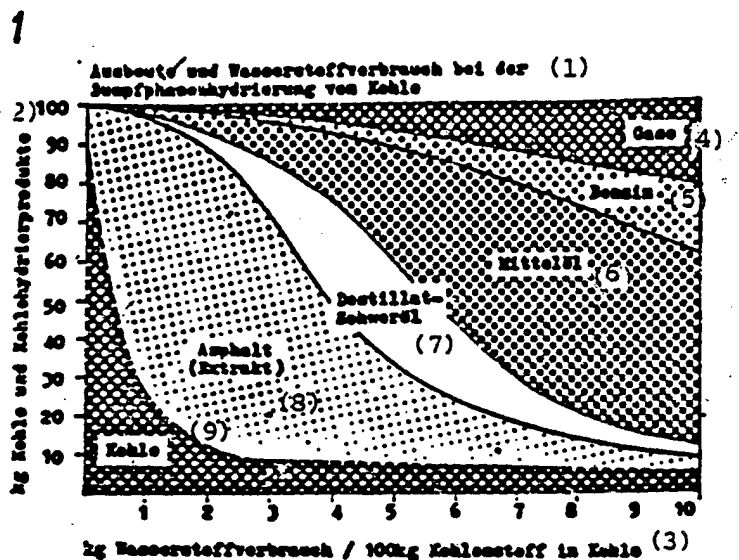
Studies of the extensive professional and patent literature show that the  $C_1$  chemistry possesses good prospects for the production of chemical products on the basis of carbochemistry. It is accordingly obvious why the synthesis gas and methanol chemistry stands in the center of research and development in many countries in the world. This applies to our Republic too. The forced development of carbochemistry, however, requires also development efforts in other branches of industry, such as for example in the fields of metallurgy, machinery construction, and equipment manufacturing.

#### Economic Conditions

In spite of the technical advances in carbochemistry achieved especially in recent years, the technical and economical level reached at present for a whole series of products from carbochemistry are unsatisfactory and do not compete in an economic comparison with petrochemical syntheses. Each substitution for petroleum by lignite is connected with economic disadvantages. For the energy application of coal in comparison with petroleum with lower work productivity, clearly greater investments and quantities of raw materials are necessary, factors that also become visible with the conversion of heating oil power plants to coal. The production of liquid products on the basis of coal in comparison with their production from petroleum is still less economical. Thus, for the same quantity of liquid product on the basis of coal the raw material requirement is about 10 to 14 times, the relative capital investment 16 times, the production investment about 6 times as much as in the case of production from petroleum. This sharp efficiency decline is above all caused by the small hydrogen/carbon ratio, the solid state of matter of the coal, and the required, multiple step, carbochemical processing in contrast to the petroleum refining.

The comparison, however, also clearly shows that for example the hydrogenation of coal for fuels is acceptable only then when the production of fuels from

petroleum is exhausted. Notwithstanding the efficiency decline at present with the production of chemical products and fuels on the basis of coal, the production of these products can be planned scientifically and technically on the basis of carbochemistry since it can be perceived that the availability of petroleum is decreasing much more rapidly than that of coal.



1. It is clear from the figure that the proportion of gasoline to medium oil is so much greater as more hydrogen is introduced into the coal in the hydrogenation process. As a result of the high cost of hydrogen, which must be in turn made from coal, an optimization of hydrogen use and product composition is required.

Key:

1. Yield and hydrogen demand with the sump phase hydrogenation of coal
2. Kg coal and coal hydrogenation products
3. Kg hydrogen demand/100 kg carbon in coal
4. Gases
5. Gasoline
6. Medium oil
7. Distilled heavy oil
8. Asphalt (extract)
9. Coal

GERMAN DEMOCRATIC REPUBLIC

BRIEFS

CREDIT FOR GDR PROPOSED--On Wednesday last, the Luxembourg Deutsche Bank received authorization for a \$150 million loan to the German Foreign Trade Bank in East Berlin. The Euro loan has a term of 6 years and is designed to be a "financial loan pure and simple," in other words without any deliveries stipulated from the GDR to the Federal Republic. The Luxembourg Deutsche Bank will try to place the loan on the Euro market, and it is to be assumed that the money will be available to the GDR in early December. Involved here is a roll-over credit; as is customary, the rates of interest will be adjusted every 6 months to the London average interest rate for 6-months papers. The Deutsche Bank and the Foreign Trade Bank agreed not to publish the terms. On the market it is assumed, though, that the Deutsche Bank is getting the money for East Berlin on normal market terms. At the moment around 1 percent above London interbank rate is being asked for borrowers with credit ratings similar to the GDR's. As the Euro markets are currently very liquid, and because--according to the foreign exchange status presented by the GDR--East Berlin has scored substantial progress in the consolidation of its foreign debts to the banks in the amount of \$8.4 billion now, it is not going to be difficult to assemble a lending syndicate for the GDR. [Text] [Frankfurt FRANKFURTER ALLGEMEINE ZEITUNG in German 8 Nov 84 p 13] 11698

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## HUNGARY

### ECONOMIC WEEKLY WRITES ON CHANGES SCHEDULED FOR 1985

#### Economic Guidance Development, Regulation

Budapest FIGYELO in Hungarian No 45, 8 Nov 84 p 11

[Article by Istvan Kollarik: "Regulation and the Development of Economic Guidance"]

[Text] Understandably great interest is accompanying the 1 January 1985 modification of the regulator system, for what is involved now is not simply the customary adjustments but rather a substantial restructuring fitted to and forming an organic part of the Seventh 5-Year Plan and the further development of economic guidance as a whole.

In the wake of the 17 April 1984 stand of the Central Committee and the resolution of the government the work directed at a further development of economic guidance has accelerated. The development of economic guidance is a process of several years. But it is essential that the changes thus far and those going into effect in 1985 should fit into this process and be in harmony with the posted goals, primarily with an improvement in the external economic balance situation, with the international competitiveness of the economy and generally with a strengthening of performance. The regulator modifications going into effect in 1985 can be regarded as an important stage in the path leading to the creation of independent and effective enterprise management and, simultaneous with this, of conditions for more effective central economic guidance.

#### Planning and Enterprise Guidance

The effort directed at increasing the independence of managing organizations is manifested in the development of the planning system. The conditions and circumstances for preparing the enterprise plan are being modified. There will be realization of the important requirement that primarily the managing organizations themselves define and approve the enterprise plan--naturally with a knowledge of and paying attention to the goals of the national economic plan--and that they coordinate the necessary tools for fulfilling it. The enterprises themselves can organize a consultation about these plans--if they consider it necessary. An exception is represented by those organizations which are carrying out significant state tasks; for these the guiding authorities can also order a consultation. National economic planning is being enriched with new elements also. Important steps will be taken to strengthen social participation

and improve the professional foundations for plan preparation. All this must be realized in the preparatory phase of the Seventh 5-Year Plan.

The institutional and organizational system of the economy is being transformed. First among these changes is the re-ordering of enterprise guidance forms. Three basic guidance forms can operate in the sphere of state enterprises--enterprises under state administrative guidance, enterprises guided by an enterprise council, and enterprises guided by an elected leadership. The sphere of authority of some trusts is being limited; for them the scope for independent market operations by the member enterprises is being expanded.

Preliminary assignment of the enterprises to the several guidance forms is under way. It would be useful to link the introduction of the new organizational forms with a dissolving of market-organization monopoly situations. A real competition situation can develop only if the organizational conditions for this can be created in all areas potentially belonging to the competitive sector, at the managing organizations and from the organizational side as well. A number of regulatory elements presume this also.

So the reclassification and transformation require the solution of three problems: Whether the enterprise should operate in a new form with its present organization or with a modified (decentralized) enterprise organization, which leadership form is most suitable, and when the transformation will take place. The guiding (founding and branch) authorities will take a preliminary stand on these issues--by 31 December 1984. Up to the end of March 1985 the enterprise collective can modify the positions they take and make them public. The transformation itself must be completed by 31 December 1986.

In the new enterprise guidance forms, in units guided by an elected leadership and in units guided by an enterprise council, the possibility for independent action will be greater; at the same time broad scope will open for worker initiatives and there will be a way for the collectives to have a say more directly than before in strategic questions. Together with this, obviously, the responsibility of the leaders and the workers for the profitable use of the property managed by them will increase. The operation of a significant proportion of the large state enterprises in the new guidance forms and within modified trust frameworks and the development of the enterprise internal mechanism and the increase in the number of self-accounting units may make the economic units more open to receiving market influences and may make them more flexible in reacting to them.

Introducing the new enterprise leadership forms also means changes in the state guidance of the enterprises. The chief directions of this change are a further increase in enterprise independence, a strengthening of indirect tools and guidance forms in state guidance of the managing organizations and a reduction in direct intervention.

From the viewpoint of the enterprises assigned to the new forms the change in guidance can be summarized by noting that direct, ad hoc state activity over the enterprises--based on superordination and subordination--appears exclusively within the framework of public authority supervision. Distinct from this are

the providing of services (for example, information, basic research, etc.) aiding market action and professional activity--but not assuming the risk of it--and the exercise of founder's rights over state enterprises.

Since enterprise supervision over the majority of state enterprises is ending, the blurring together of branch activity guidance and supervisory organization guidance may come to an end. With this step, normative activity guidance takes the place of branch organization guidance--in regard to the system of legal tools this ended in 1968 (it depended on profile constraints, enterprise supply responsibility and plan directives).

#### Development of the Money and Credit System

The changes do not leave the banking system unaffected either. There will be primarily a separation of the bank of issue and credit bank functions. We can regard the coming year as a testing period for the tools developed for bank of issue regulation.

It will be an essential new element of the money and credit system that the effective domain of (commercial) credit which can be extended by one enterprise to another will be expanded and promissory notes will begin to function. These tools will be suitable for measuring the economic strength and reputation of the various enterprises, because it is obvious that not every enterprise will be able to get commercial credit and the bank will not honor every promissory note, only those for which the reputation or performance of the issuing enterprise provides cover.

There will also be substantial changes in the third domain of the guidance system, in regulation. These affect the price system, income [jovedelem] and earnings [kereset] regulation alike.

Further steps are being taken to eliminate the simulation elements of price formation in the producers' price system. The profitability constraint will end and the price level constraint may be gradually dismantled as a function of an improvement in market conditions and a strengthening of competition. Building an organic link between producers' prices and consumers' prices, dismantling the price supports in some product groups and making the turnover tax system uniform continue to be important aspirations also.

#### Changes in the Tax System

The long-range goals presume a transformation of the tax structure in which net income and a substantial part of the taxes will be transferred to the domain of final consumption and parallel with this the ratio of net income realized in the management area may be moderated. Thus the rate of incomes centralized from the producing area, primarily the level of the profit tax, may decrease. But this goal could not yet be realized in the tax system in 1985. Since, however, we want to moderate the level of the profit tax, the taxes proportionate to the resources will receive a significant role in the system. The new regulation will result in more definite differentiation than earlier and it will be favorable--especially in its dynamics--for highly profitable enterprises or



those increasing their profit quickly. Simplification is another essential aspect of the change in income regulation. This goal is expressed by the new system for building up reserves and by creation of a uniform interest [erdekeltsegi] fund.

Elements indicative of future goals and elements reflecting the present situation appear together in the income regulation system. Withdrawals aimed at reducing developmental resources, regarded as temporary earlier, will end and together with this the purchasing power control requirements will be built into the new withdrawal forms. There is no doubt that in a certain sense the income regulation is contradictory. This derives from the fact that while economic guidance as a whole is constantly changing in the desired direction the modification of income regulation takes place at a given point in time.

A basic change is taking place in the system of earnings [kereset] regulation; in the future there will be three forms of earnings regulations. One of these, level regulation, eliminates the often criticized increment character of the system and the contradictions of average wage regulation. It is true that temporarily, in 1985 and 1986, the new form will operate with a built-in brake, but even so there will be substantially greater freedom of movement for incentive wage management. In regard to their concrete solutions the other two forms of earnings regulation, increment and central regulation, also represent a step forward compared to earlier ones.

All these changes are coupled with a definite effort to increasingly dismantle or eliminate the still existing supports and unambiguously aid the strengthening of enterprise independence. Under the new circumstances organizations with an entrepreneurial spirit better accommodating to the needs of the market will certainly have greater scope while the consequences of inadequate management must be borne by those which do not come up to the new requirements. It is to be hoped from all this that the enterprises will use their resources more efficiently, and increasingly use them in those areas where the income of the economy is increasing. This is a condition for seeing that our economy can gradually take a course where the balance requirements can be satisfied not with limits on domestic use but rather with effective use of resources, and thus the development of the economy may gradually receive a greater impetus.

#### Enterprise Income Regulation

Budapest FIGYELO in Hungarian No 45, 8 Nov 84 pp 11-12

[Article by Agnes Balazs: "Enterprise Income Regulation"]

[Text] One of the goals of the 1985 regulation is to see that the resources used by the enterprises are properly reflected in enterprise costs; this justifies primarily an increase in the burdens connected with the manpower used. (Reducing the difference between the social and enterprise costs of manpower will probably improve the management of manpower.) It is a further goal of the regulation to create a more tangible difference between the income positions of enterprises or cooperatives which manage well and those which manage badly, if possible to reduce the ratio of taxes which suppress profit differences, and to create more favorable conditions for technical progress by ending

the centralization of amortization. Finally, even if more spendable income, as a whole, cannot be left at the enterprises, regulation should offer the leaders of the enterprises greater possibility for choice and more freedom of movement, by changing the rules for taxation, fund generation and use.

#### Simpler Profit Accounting

Ending the distinction between the profit according to the balance and the profit serving as a basis for accounting (interest) simplifies income regulation. In addition, profit according to the balance reflects the effect of all supports and withdrawals influencing the results (note that substantively the profit serving as a basis for accounting--interest--will survive).

The enterprise can continue to generate a profit reserve from the untaxed profit. It is a new aspect that a number of special reserve funds generated at the burden of costs or of untaxed profit are being abolished; the closing balance of the funds will increase the profit reserve. Thus the enterprises are freer to decide how to use the sum placed in the fund and how to use the resources being continuously generated; the special character of these ends.

The rule for payment of the city and community contribution will not change in 1985. Beginning next year the profit tax will be levied on a tax base increased by the sum of the city and community contribution. At the same time the profit tax key will be reduced from 45 to 35 percent, which means a certain reduction in the size of the tax even when calculated on the larger base. This is the first--if not too striking--step in the direction of moderating withdrawals that are proportionate with profit. Beginning in 1986, when according to our plans the base for the city and community contribution will be the wage costs, the restructuring between wage correlated and profit correlated withdrawals will become stronger.

A concession in regard to the profit tax can be obtained in certain cases--defined in an annex to the decree. For example, a tax concession can be given in order to give preference to consumer services provided for the populace or for research and technical development services; this will "offer state aid for undertaking greater than customary risk."

#### The 10-Percent Wage Tax

The 10-percent wage tax levied on wage costs and--to use the category used today--other shares is a new element of regulation. This raises to a more realistic level the burdens of using live work, because today the wage burdens of our enterprises do not include elements which influence the calculations of other countries such as the wage consequences of consumer price supports more restricted than today or of a more rational turnover tax system. In itself this 10-percent withdrawal does not yet increase the enterprise burdens of use of live work to a suitable level, but it appeared unrealistic to increase the expenditures connected with wages to a greater degree than this in a single step. The enterprises calculate the wage tax following payment of the profit tax and it must be paid during the year, similar to the profit tax advance. In a few areas--primarily with a temporary character and to counterbalance the presently very low wage yield--the tax levied on wage costs has a concessionary magnitude.

It is an essential change that regulation will no longer make a distinction between the shares [reszesedesi] fund and the development fund. Following the distribution of the 1984 profit the enterprises will create a uniform interest [erdekeltségi] fund out of the assets of their shares and development funds. This fund will be the source for expenditures connected with increasing personal incomes, with development and with filling the circulating fund. The interest fund will have other sources in addition to the profit; in the course of using the fund these can be used as well to finance any of the listed goals. This change will improve the liquidity of the enterprises too, because the segregated character of the amortization deposit account will end.

The interest fund is the base for paying additional taxes. Here the reason for the property tax and the accumulation tax, among other things, is that the regulators--which up to now have ensured that enterprise purchasing power which could be used for developmental purposes and which have been kept within the planned framework--will be replaced by more useful ones. Thus, beginning in 1985, we will not renew the withdrawal or sequestration of developmental resources, which had an unfavorable levelling effect on the developmental possibilities of the enterprises. Also losing their validity are the investment fee, which posed extraordinarily strict conditions, and the construction tax decree.

#### Property Tax and Accumulation Tax

The property tax is a withdrawal adjusted to the enterprise's own property. Its magnitude in general is 3 percent, its source is the interest fund. In the first instance the interest fund available in 1985 must be taxed on the basis of the 1984 property. Actually this tax is the state's share of the expected return on the enterprise property. It follows from this aspect of it that, due to the quite different yield conditions for the enterprise property tied up, the property tax can be made to operate only by realizing certain concessions and exemptions. Another type of concession worthy of attention is when we exempt or tax at a lower rate enterprises with a low property value and a small number of employees--with the intention of encouraging the creation of small enterprises and to achieve a certain simplification.

The other tax to be paid from the interest fund is the accumulation tax. This tax burdens the enterprise not on the basis of what is generated but rather on the basis of intended use. So its role is not to even out income differences but rather to influence enterprise intentions. After making payments on the investments that the enterprise itself has decided upon and after filling up the circulating fund from its own resources or after paying back credits which were an advance on the circulating fund, they must pay the tax in proportion to these expenditures. The possible magnitude of the tax can vary between limits of 0 and 25 percent. Within the domain of enterprise income regulation the valid tax key will be uniform. At the same time--since we are talking about a tax to influence enterprise behavior--this tax seems suitable for the realization of business cycle effects in time, or for influencing these. For this reason the valid tax key can be established only with the conclusion of the annual planning work. In the course of imposing the tax one does not weigh the importance of the various investments the enterprise decides upon, because this is not a tax with prohibitive intent, as was, for example, the investment fee, but rather means raising the profitability standard in regard

to accumulation. Thus the group of exemptions is very small and applies basically to the developments of the construction materials industry serving the needs of the populace and to network developments of transportation and telecommunications. Naturally, if an investment fee has been paid on an investment already the accumulation tax does not have to be paid on this investment. It is a change of minor significance, but an interesting one, that the administrative ban on building enterprise resorts, office buildings and similar buildings comes to an end, but a 50 percent accumulation tax will burden the construction of them.

Finally, the interest fund is the source of the earnings tax interdependent with the earnings regulating system. This replaces the progressive tax in the system of enterprise taxes. The enterprise pays the tax as an advance in the course of the year; its final source must be created to the burden of the interest fund in the course of calculating the year's results. (Thus the 1985 earnings tax will burden the interest fund for 1986.) Since the earnings tax is tied to the year's payments (from 1 January to 31 December), the already taxed sum put in the shares fund in the course of closing the 1984 balance must be exempted from the earnings tax for 1985 (in the interest of avoiding double taxation of the same enterprise income).

The centralization of depreciation write-offs is ending. This means that all those enterprises which can avoid a deficit can count with greater security than today on generating their own resources representing a material background for their smaller investments and developments. Naturally they must also account for the fact that ending the centralization of amortization eliminates the relative advantage enjoyed by those managing organizations at which there was no centralization even previously.

The new system of enterprise income regulation will not present an intolerable burden for those enterprises which are profitable and where the yield on resources they use is satisfactory, for it is one aspect of the changes that the ratio of withdrawals with a levelling effect is decreasing. The switchover will not be easy, for the ratio of decentralized income cannot increase. Thus changing the withdrawal channels will involve a re-ordering of the ratio of the spendable incomes of the enterprises. But this re-ordering of the ratio of the spendable incomes of the enterprises. But this re-ordering must be undertaken, because this is one step toward income regulation which will create better framework for enterprise management.

#### Price System Changes

Budapest FIGYELO in Hungarian No 45, 8 Nov 84 p 12

[Article by Laszlo Racs: "Changes in the Price System"]

[Text] In the near future, and in 1985 too, the price system must satisfy a dual requirement:

- 1. Progress in the direction of real competitive prices, and
- 2. Holding back price increases.

In 1980 the practice of following convertible foreign trade prices was introduced into the major portion of industry. In 1984 we began to convert the so-called simulated competitive price to real domestic competitive prices. Competitive bidding, entrepreneurial price formation were introduced in the construction industry. Parallel with building up a market entrepreneurial price setting was generalized in the service areas belonging to the realm of competition. The value proportionate nature of consumer prices was improved and the share of free prices in popular trade was increased by nearly 50 per cent.

We are trying to make competitive prices general in the interest of vitalizing economic development. The competitive price system presumes a competitive economy, albeit the link between them is a mutual one. A relaxation of the price formation restrictions not coordinated with domestic market relationships could feed inflation.... The bad experiences acquired recently have confirmed that the danger of inflation is real. It is enough if I refer to the disorganized nature of the fruit and vegetable market or the price increase for industrial consumer goods a year ago (it was as a result of this that the obligation to report price increases was broadened).

Despite the entrepreneurial price system the efficiency of the construction industry price system has not improved, because the circle of entrepreneurs is not wide enough.

Some of the changes in the regulator system (for example raising the tax level) increase the pressure on prices, that is, because of the changes it is an increasing requirement that with the tools of the price system we should aid the realization of the state policy to hold back price increases, we should put an end to the automatic passing on of cost increases, because only in this way will the changes that are to be made in regulation as a whole be able to have the necessary stimulating and constraining effect. Because of all these things the development of the price system can be carried out only gradually, in harmony with the development of the economy--of guidance and the material-technical ratios.

Taking what has been said into consideration, the stabilizing elements in effect in 1983 will remain in the next phase of developing a real competitive [verseny] price system:

- 1. the authoritative price forms which will not decrease substantially;
- 2. the strict prescriptions for competitive type [kompetitiv] price formation, although in a narrower area and with somewhat changed rules;
- 3. the price calculation obligation (on the basis of the economic calculation);
- 4. the ban on use of unfair prices, and
- 5. the various forms of price control and the information system serving this.

## Against Unfair Prices

It is an important change in the legal regulation of the price system and price mechanism beginning in 1985 that price formation must stay within the framework prescribed in "competition procedures" regulated by a law (in the law forbidding unscrupulous economic activity).

The concept of forbidding an unfair price is based on the idea that (a) the price is a measure of economic decisions which reflects the social expenditures expressed via market relationships and (b) the calculation is a tool for providing foundations for enterprise decisions in regard to the given price and in general not a cost justification serving as a basis for the price.

The category of unfair profit frequently hindered technical progress and a reduction in expenditures, while it made possible an unjustified social "overvaluation" of enterprises operating badly, with high costs but small profit. The new rules for price formation open a possibility for radical change in this area.

In accordance with the modified relationship between the price and the calculation, the general rule for price formation will change. In all our legal prescriptions thus far the first price formation rule was an obligation to calculate the enterprise production cost for the product. The calculated price was given by adding to the production cost a profit which did not clash with the ban on unfair profit. It was possible to deviate from this on the basis of market relationships, but the base for the price remained the individual, enterprise cost. The organization doing the checking and the organization being checked started from this. The new decree turns this around and states that the price can be developed on the basis of supply and demand relationships, taking into consideration the justified costs. The regulation concerning unfair prices provides orientation concerning how we must interpret a price based on supply and demand relationships and which costs are justified and which are not. According to the regulation the cost principle will figure in price formation in the future as one of the factors of honest behavior. The practice to be followed will be that one cannot use a disproportionately high price compared to the prices developed amidst the given supply and demand relationships, one cannot raise a price by abusing a superior advantage or force a one-sidedly favorable price or realize a high price by excluding others from the market.

## Price Administration Will Decrease

The price bureaucracy will decrease. The number of price and price calculation provisions, directives and guiding principles will be substantially fewer. A uniform legal regulation will go into effect for price formation in the industrial domestic trade and various service areas. The pertinent government decree also defines which special cases can be regulated separately and designates the direction or the basic framework for these.

For the time being a separate regulation will govern agricultural price formation and construction industry price formation in the broader sense.

The obligation to prepare a preliminary cost appraisal calculation is being modified. Preliminary calculations aimed at price formation must be prepared only in those trades for which a separate regulation so prescribes. In general this will include only those trades in which production cost price formation was typically done up to now. In the great majority of trades the earlier preliminary calculation can be replaced by calculations or data proving the proportionality of the prices.

When the price appraisal obligation remains it can be satisfied by preparing the economic calculation. In this way the product calculation is simplified to calculating the direct costs; the cover proportion is the difference between the price and the direct costs. The spread of this from product to product or rather judging this spread will be one of the chief tools of price supervision in the future in those areas where adjustment to market prices does not provide an unambiguous orientation.

The other documentation connected with the price is being simplified too. For example, it is not necessary to prepare enterprise price formation rules and the obligation to record so many types of data in connection with this comes to an end. But every enterprise must have those data on the basis of which its own price formation can be judged at the time of being checked.

#### Four Turnover Tax Keys

The reduction of producers' price supports, the "pricifying" of them, is continuing. Even this year the various possibilities for turnover tax rebates in industrial price formation were ended. Despite the increasing role of a differential turnover tax in export regulation we will maintain this prescription in the future as well.

Agricultural supports are being reduced and interdependent with this the agricultural prices and some foodstuffs industry prices have been modified.

Avoiding supports makes necessary another increase in the producers' or service prices for coal and electric power, freight and postal services.

The resolutions have designated the chief directions for development of the consumers' price system and the turnover tax system. In the process of creating value proportionality they have designated those products and services for which consumers' price supports will remain for a longer time (milk and milk products, household energy, medicines, passenger transport, state housing, drinking water, children's institutions, certain cultural products or cultural and health services, and the draining off of sewage). This does not mean the freezing of the prices for the supported products and services, it means that prices in these areas will continue to be set with lasting and significant social preference.

It represents a lower degree of social preference that in the future we must strive to develop a consumers' price without a turnover tax for some of the consumer articles which were subsidized earlier. These are the most important foodstuffs (with the exception of milk and milk products, mentioned earlier),

children's clothing and basic school articles, the cultural articles and services not especially stressed (supported) from the social policy viewpoint, plus construction materials.

Beginning in 1985 we will try to create a turnover tax system operating with four tax keys, which will be supplemented by a consumption tax in the sphere of so-called undesirable articles. The single, 11-percent "normative" turnover tax of the 1980 price adjustment did not prove realizable in practice. This would have made necessary an unrealistic increase in the prices for consumer articles and services listed in the second line of social preferences, while in the other group of products we would have had to carry out a price reduction not in harmony with the supply and demand relationships. According to the present conception the following four keys will be implemented--0, 11, 22 and 30 percent. The 22 percent key will be used in the area of adult clothing articles and the 30 percent key will be used in the area of cosmetics and in the vehicle commodity group and in the area of luxury goods. A separate consumption tax will be established for the latter also. The 11-percent key will apply to the great majority of industrial articles. The four turnover tax keys will be applied gradually at the time of price changes to be implemented in harmony with standard of living policy.

#### Admission to the "Price Club"

Commercial price formation will change too. Price formation differences which become unjustified in the process of integrating trade and production will end. The present system of calculating the profit margin will be abolished in consumer goods trade (but it will remain for the time being in wholesale trade).

In industry we will continue to increase the number of "price club" members who are exempted from competitive type [kompetitiv] price formation. According to the surveys this will include in 1985 the price formation on a product volume making up about 40-45 percent of the production of the processing industry. The previously used enterprise export profit prescription will end in competitive type price formation and only following the export price level will remain as a general rule. However the trend is to provide an exceptional possibility so that if measurement of the enterprise export price level is excessively uncertain then the National Material and Price Office can prescribe for that enterprise the identity of the cover proportion of export and domestic sales. This will be done temporarily and only for a few enterprises.

The methods of price supervision will change. We have demanded more market and commodity information from the price controllers, for in the future they will have to concentrate more on the relationship of price and use value ratios, domestic and international price ratios and the price ratios recognized by demand. Price supervision is one of the tools of the struggle against dishonest economic activity.

Beginning in 1985 prices will be formed amidst new taxation, interest and organizational relationships. In the wake of the changes the price structure will be modified and the valuation ratios for resources will be transformed. Influenced by these things the managing organizations obviously might initiate greater price changes than would have been expected on the basis of the changes



in the price system and price formation. Under these circumstances it is of especially great significance that the price be adequately restrained. In the areas of industry under competitive type price formation, in transport and communications, for the basic agricultural products and in the sphere of the most important products and services purchased by the populace the authoritative price form is called on to keep the price restraints within limits. Nor is the role of authoritative prices small in the construction industry. But for about one third of the industrial articles and for repair-assembly, personal and other services the price mechanism makes possible a somewhat freer restructuring. In these areas it is especially important to develop some supply surplus. The tools of market building must be used increasingly in the areas of both authoritative prices and free prices; factors which would disturb trade must be prevented or quickly and effectively eliminated, we must liquidate unjustified monopoly situations, and must take determined action against all forms of dishonest economic activity.

Economic guidance intends to conduct a policy which will hold back price increases, which means that it is prepared for the justified price ratio changes which will accompany the further development of economic guidance, but it is also prepared to prevent price changes which are expressed in unjustified, one-sided price increases.

#### 1985 Development Regulation

Budapest FIGYELO in Hungarian No 45, 8 Nov 84 p 13

[Article by Henrik Nagy: "Development Regulation in 1985"]

[Text] The volume of enterprise investments cannot increase in 1985 either, that is, the developmental financial resources of the enterprises cannot increase. Regulating investment purchasing power serves three goals. On the one hand it strives for adequate security so that changes during the year can be avoided. In the second place it wants to ensure that as little as possible income is regrouped from efficient enterprises to inefficient areas, thus it tries to strengthen differentiation based on profitability. In the third place it wants to aid the longer range foresight of the enterprises. The number of burdens connected with accumulation and the number of withdrawal channels will decrease in 1985 and the number of ad hoc exceptions will be moderated. Taxing existing financial assets (the property tax) will have a greater role in regulating the resources being generated and regulation of investment use will be realized through the accumulation tax.

#### A Uniform Forint

Beginning 1 January 1985 the managing organizations will generate a uniform interest [erdekeltsegi] fund; thus the previously separately generated shares fund and development fund will be abolished. This step increases the financial independence of enterprises and cooperatives since they decide themselves on expenditures from the interest fund connected with increasing personal incomes and with their accumulation activity. This is a significant step in creating a uniform value for the forint.

The initial account of the interest fund will be the accounts of the shares and development funds remaining after closing the 1984 balance. They must put into the interest fund the calculated depreciation write-off and other resources of their own, thus receipts connected with scrapping and profitable use of fixed assets and sums of money coming from other enterprises, the populace, interest representation organs and central funds.

The enterprises pay out of the uniform interest fund the state loans to be repaid from amortization, repayments on long term investment credits and circulating fund advance credits and from it they must satisfy the obligation to fill the circulating fund directly.

The rules for state loans offered for central investments to be repaid from untaxed profit, for state loans authorized as state support for enterprise investments and the obligation to pay a fee on state contributions to funds do not change. These continue to reduce the base for the profit tax.

The concession offered--in the event of meeting the prescribed conditions--in regard to interest on investment credit and state loans for certain stressed developmental purposes (developments serving an expansion of the exportable commodity base, energy rationalization, material conservation and use of waste) moderate the sum of the profit tax to be paid.

The centralization of amortization will end on 1 January 1985. The managing organizations will put the entire amount of the calculated depreciation into their interest funds. This will expand primarily the usable income of industrial enterprises. By increasing the enterprises' own resources a way opens up for a moderation of the accumulation expenditures of the state budget--primarily by reducing the budgetary supports in the area of energetics--and for shortening the repayment time of long term investment credits for enterprises having a credit connection with the Hungarian National Bank.

#### The Accumulation Tax

The obligation to pay in developmental funds (in cooperatives the obligation to sequester them) comes to an end. In 1984 this was generally 22 percent. The construction tax--this was 20 percent to be paid on the basis of the construction part of investments, it was 10 percent for some purposes--and the 25 percent--in some cases 15 percent--investment fee lose their validity. These methods--justly criticized in recent times--will be replaced by a property tax--which also expresses a minimal yield requirement on fixed assets--or by an accumulation tax, which serves to regulate investment processes. These new forms--in contrast to the old methods--will burden more proportionately the enterprises which are managing well and those which manage less efficiently. The accumulation tax--which must be paid throughout the entire process of the investment--is levied and accounted for after the fact, in contrast to the fee.

The new tax form is the most flexible element of enterprise income regulation and it also performs a business cycle regulating task. The magnitude of the accumulation tax is expected to be set in a range of between 0 and 25 percent in that a magnitude in harmony with the national economic accumulation

possibilities will be fixed by a regulation every year. The magnitude of the tax for 1985 will be determined when closing the annual national economic plan. (According to the preliminary calculations the key for the accumulation tax in 1985 will probably be between 15 and 20 percent.)

The base for the accumulation tax--defined in the regulation concerning the order of investments--is the investment expenditures for the given year (the sums to be activated) and the filling of the circulating fund financed from the interest fund and the part of credits repaid connected with filling the circulating fund and to be repaid from the interest fund. One need not pay an accumulation tax on taxes, fees, duties or interest.

One need not pay an accumulation tax on investments decided centrally or on those developments decided on by the enterprise for which the managing organizations paid an investment fee. Also exempt from the accumulation tax--to the degree previously determined--are development of transportation networks (systems) in the transportation, postal and telecommunications branches, vehicle investments for long distance and local mass transit and the development of telecommunications networks (systems). Investments under way and new investments started in the interest of a better supply of building materials to the populace will not be burdened with the accumulation tax--on the basis of ad hoc decisions. These preferences express the intent that the so-called "bottle-necks" of economic and social development should be eased as soon as possible.

The administrative ban on construction of office buildings and headquarters buildings and other installations falling under the construction limit established in the regulations will come to an end. Instead, an accumulation tax of 50-percent must be paid for such investments, a magnitude of a restraining character.

The lower value limit for fixed assets, which had been 20,000 forints, will be raised to 50,000 forints for investments beginning after 1 January 1985. This will broaden the possibility for smaller value investments by the enterprises.

#### Loan Possibilities

In essence the financing deals for external resources which can be used for enterprise investments will not change. On the basis of the goals and conditions figuring in the supports guiding principles the managing organizations can get state support (budgetary awards and state loans), state fund contributions, and can assume investment credit. The interest on a state loan continues to be 13 percent, the fee for a fund contribution is 17 percent, the interest on credits will not change either.

In 1985 there will probably be a transformation of financing deals for some large volume, long pay-off-time investments--primarily in the energetics sector. A state capital allocation involving payment of a fee will replace the previous state loan. The principles for and magnitudes of the new deal are being worked out now.

The managing organizations can supplement their own resources with long term investment credit only for those investments which are adequately prepared, which will pay off within a definite time from the interest fund generated by virtue of what is invested and for which repayment of the credit can be expected within the general credit maturity times.

The bank authorities will subject credit requests to competition and those will have an advantage which will contribute to realizing the government programs aimed at improving the payments balance or will contribute to improving supply to the populace. The enterprise investments which are of smaller size, which can be carried out in a shorter time and which will pay off quickly will have a better chance.

In harmony with the changes in the regulator system (eliminating the centralization of amortization) and in the interest of increasing the flexibility of providing credit the final maturity of credits must be calculated in the future not from the completion of the investment but rather from the time the credit is first payable. This will reduce the running time of credit by an average of 2-3 years.

The bank authorities can give preferences in regard to the term of the credits and the prescribed profitability requirements basically as a function of the character of the goal to be achieved by the investment. Investment credit with a term longer than the average can be extended for developments aimed at increasing the export commodity base, economical replacement of import, rationalization of energy use, economical use of materials and technological modernization--as a function of the prescribed pay off conditions.

The general profitability (assets proportional profit) is 15 percent. A degree smaller than this (9-11 percent) can be accepted for some developments defined by the unique nature of the activity. The profitability requirements can be ignored for investments in environmental protection, agricultural infrastructure and water management. The bank authorities will fix the conditions when signing the credit contracts.

Certain credit restrictions will remain in effect too. Thus investment credit cannot be extended to finance investments which will take longer than 36 months to complete--disregarding certain exceptions--for expanding capacity which will result in increasing the personnel of enterprises operating in the Budapest agglomeration or in the attractive zones of certain cities, with the exception of the development aimed at realizing stressed national economic goals or expanding the retail trade network. Investment credit cannot be extended to finance the construction of office buildings, headquarters buildings or other installations falling under the restriction.

#### Earnings Regulation

Budapest FIGYELO in Hungarian No 45, 8 Nov 84 pp 13-14

[Article by Jozsef Sebestyen: "Earnings Regulation"]

[Text] Of all the regulator changes going into effect in 1985 perhaps the greatest anticipation involves the modification of wage and earnings regulation.

Wage regulation affects the workers directly, but the regulation valid for the enterprises also can function in a way to truly increase performance only if it is supplemented by an effective internal interest and incentive system. Thus the enterprise wage regulation system is not in itself a guarantee of efficient, economical performance of work or of rational management with live work.

One cannot expect different functions having effects opposed to one another from the wage regulation system of a given period. The experiences of recent years prove that wage regulation is not able to find a solution simultaneously for incentive to perform more efficient work and to keep the outflow of purchasing power within the planned framework, limiting incomes, because these two functions only weaken one another, and can be realized only to the detriment of one another. Any task is especially difficult if the economic environment and other regulator system conditions for it do not exist.

In the present stage of the development of the economy the task which cannot be postponed, in addition to the primacy of the stability of the balance situation, is a vigorous development of efficiency, of individual and enterprise performance. Wage regulation must be subordinated to this and so, in case of need, must be the system of income regulation. For this reason the wage regulation to be valid beginning in 1985 must be one which forces an improvement in the efficiency of live work much more vigorously than the present one, providing suitable incentive for more and better work (at both the enterprise and individual level), and at the same time sanctioning inadequate efficiency. Simultaneous with this it must prevent a disadvantageous levelling and must make possible a differentiation depending on performance, the development of real income differences. Earnings differences based on the efficiency of work performance must initiate a rational movement of manpower from the less efficient enterprises in the direction of those working efficiently.

In the interest of this there will be a change in the rigid separation of income regulation and wage regulation; in the future wage regulation will be based much more on the other elements of the regulator system, including primarily the price and market relationships, the development of profit interest and the methods and trends for making the leaders and the collective interested in this.

The 1985 regulation puts an end to the previous separation of expenditures occurring in connection with the wage costs and those from other sources, it puts an end to application of the so-called conversion key and switches to a uniform view of earnings. This means that it takes into consideration and regulates together the personal income payments in connection with the wage costs and those in connection with the uniform interest fund which is coming into existence in accordance with the modified income regulation.

The regulation of earnings is based on the circulation of money; that is, payments for the period between 1 January and 31 December are in the sphere of the regulation for the given year. (Naturally in the future too this will include payments connected with the final accounting in December which are held over until the beginning of January for technical reasons.)

In place of the increment regulation used thus far it is also possible to use a regulation of the level of earnings--in place with the creation of the necessary economic conditions--where the entire sum of earnings serves as the tax base. Thus there will be a profit requirement for every single forint, which the enterprise must produce if it wants to keep its workers. A linear wage tax is applied on all wage costs. As a result of this the role and significance of earnings will increase at the managing units and this will prompt the enterprises to a more realistic, sounder deliberation when choosing among production factors.

The development of earnings at a managing organization will depend on what the tax bearing capability of the enterprise is, that is, how profitably it is managed. If, after paying the other taxes, the enterprise still has sufficient resources to pay the earnings tax, then there is actually no obstacle to realizing an earnings level of any magnitude, depending on its tax bearing capability. In contrast to the regulation of per capita average wages of previous wage regulation systems it is a new feature that in earnings level regulation based on tax bearing capability the tax on earnings is not calculated on average enterprise earnings but rather on earnings established separately for each person.

The spread of earnings level regulation is a continuing activity lasting several years the pace of which will be influenced primarily by the development of the other necessary economic conditions. This form of earnings regulation can be introduced in the so-called competitive domain of the economy where real profit relationships are realized. In those areas where this is not realized--or where it is not useful to realize it because of national economic interests--earnings increment or central earnings regulation will be used instead of earnings level regulation. The two latter forms also differ substantially from forms of regulation used thus far because here also, with the changed burden of live work, the regulation is aimed at earnings and, in connection with the introduction of a linear wage tax, the progressivity of the earnings tax may be significantly less than earlier.

As a function of the economic conditions which have developed the special branches or sub-branches will be assigned centrally to the several forms of regulation. Going beyond the central decision it is possible, in some cases, for a choice among the forms of regulation to be applied on the basis of an independent enterprise decision. But the goal is for more and more enterprises and special branches to use the most flexible form, earnings level regulation, as soon as possible.

Earnings level regulation will be realized beginning in 1985 in a significant part of the machine industry, the construction materials industry, the chemical industry and light industry, throughout the finishing construction industry, and in some foodstuffs industry, transportation and domestic trade special branches. An earnings tax must be established individually for every single worker--independent of the position held--and the combined tax for the employees represents the size of the tax to be paid by the enterprise.

The smallest earnings tax, 5 percent, must be paid if the annual individual earnings of the worker do not exceed the minimum total wage according to the

regulations now valid (24,000 forints per year). Beginning with this the earnings tax brackets change by a magnitude of 12,000 forints up to an annual earnings limit of 96,000 forints, above this they increase by 24,000 forints. The magnitude of the tax increases progressively. The numbers are published in tabular form, showing for each given earnings bracket the tax to be paid in forints on the preceding bracket (or brackets), and indicating the tax key percentage belonging to the earnings size appearing within the given bracket. Thus one must always calculate as a percent only the corresponding portion of the part within a given bracket and add to this the absolute sum of the tax. For example, the tax on annual earnings of 30,000 forints is 1,200 plus 10 percent in the 24,000-36,000-forint tax bracket. The earnings realized in this bracket are 30,000 minus 24,000 or 6,000 forints; 10 percent of this is 600 forints and the tax on the preceding bracket is 1,200 forints so the total earnings tax is 1,200 plus 600 or 1,800 forints.

It will be useful to use earnings level regulation in enterprises with a stable profit; in the contrary case it may happen that, lacking the tax bearing capability, the enterprise will not be able to pay or guarantee the wages or earnings of the previous year. Because of this the enterprises of the special branches assigned to this form of earnings regulation may--with regard to their different starting positions--make use of a possibility of choosing increment regulation instead of level regulation in 1985, but their decision will bind them for 3 years. The enterprise must report this decision to the ABHM [State Wage and Labor Affairs Office], to the appropriate first instance tax authority and to the branch ministry by 31 January 1985.

Earnings increment regulation takes into consideration the increment in the annual average earnings of the workers employed full time at the enterprise. An earnings tax with tax keys of 150 to 450 percent must be paid on the size of the increase, calculated as a percentage of the average base earnings, compared to the average earnings of the preceding year.

Multiplying the tax by the total number of personnel used gives us the total size of the tax to be paid. For example, in the event of a 5-percent increase in average earnings of 60,000 forints for the base year the calculation of the tax is as follows:

Increase in average earnings as percentage of average base earnings	Total (forints) calculated in the given bracket	Tax key in the given bracket (percent)	Tax total (forints)
0-1	600	150	900
1-2	600	175	1,050
2-3	600	200	1,200
3-4	600	225	1,350
4-5	600	250	1,500
Total tax for each person:			6,000

Presuming that the total personnel used was 200 persons (and that the 50 percent of the personnel calculated on the basis of the earnings of workers employed part time and as workers at home has been subtracted already as a concession), then the enterprise level earnings tax to be paid is 1.2 million forints. Increment regulation will be used primarily in the sphere of repair activity, in foreign trade and at planning and investment enterprises.

Central earnings regulation will continue to be used in areas where profit interest is not realized. Here it is also useful to realize the general principle of taxing the wage increase. The previous year, or base year, earnings can be modified by the central wage increase figure obtained from the national economic plan; every increase which takes place in comparison to the earnings thus corrected has a tax obligation. Since here, in contrast to increment regulation, there has been a base earnings correction, the tax keys start from a higher figure and reach the 450 percent figure more quickly. The tax key is 200 percent in the range belonging to an increase between 0 and 1; it is 225 and 250 percent in the following ranges; and it changes by 50 percent steps above an increase of 3 percent, so that the highest tax key must be paid from 6 percent. (Compared to the uncorrected average earnings of the previous year, however, this case means an actual increase of at least 10-11 percent, taking into consideration the expected 1985 development of the central magnitude increased for the base and centrally guaranteed.) By summing the tax entries for the increase in earnings calculated by range we get the tax per person; multiplying this sum by the total personnel used—as modified by a concession for workers employed part time and working at home—gives the earnings tax to be paid.

There is a form of central earnings regulation which the enterprise can apply on the basis of its own decision instead of the earnings level or earnings increment regulation designated for it. The enterprise must decide on this choice by 31 January. In this case, however, the centrally guaranteed magnitude with which the average base earnings can be corrected is only 2 percent, and the enterprise can realize an increase above this of only 1 percent, with a tax payment. In a case contrary to this it loses its right even to the 2 percent concessionary part.

The enterprises can produce the base data needed for the 1985 earnings regulation by calculating a base with the same content as what was taken as a base for the actual payments in 1984, in accordance with the new rules going into effect. It is also a rule connected with the conversion that in the future they can no longer record wage reserves generated up to the end of 1982 or the advanced wage development used.

An extra tax plan is intended to eliminate unjust advantages or earnings increase possibilities deriving from the conversion; this must be applied by enterprises working according to earnings level or earnings increment regulation. If the index of added value per forint earnings for the subject year decreases compared to the similar index for the preceding year then there is an obligation to pay the extra tax. (In regard to earnings regulation one must understand by added value an index consisting of the items defined in the ABMH regulation—profit according to the balance, wage costs and depreciation write-offs.) The base for the extra tax must be calculated by subtracting from the



earnings for the subject year the earnings for the previous year multiplied by the index of the added value index (dividing the value for the subject year by the value for the preceding year). This difference constitutes the base for the extra tax; the size of the tax will be 150 percent in 1985, 75 percent in 1986 and the tax will end beginning in 1987.

Such a tax does not have to be paid by an enterprise at which the increase in average earnings realized for the subject year does not exceed 3 percent. The reason for this is that even the (strict) central earnings regulation form chosen voluntarily makes possible or permits this 3 percent and in this case--since it is one version of central earnings regulation--the formation of added value is not a condition.

On the basis of preliminary calculations and expectations about 40 percent of the managing organizations will use earnings level regulation and 20 percent will use earnings increment regulation in 1985. The remainder will operate according to the prescriptions of central regulation, including those using central earnings regulation by choice.

#### Foodstuffs Economy

Budapest FIGYELO in Hungarian No 45, 8 Nov 84 p 14

[Article by Rezdo Kostyal: "The Foodstuffs Economy"]

[Text] In addition to the wine, poultry and canning industries, the meat industry, milk industry, milling industry, forest management and the production of seed are coming under agricultural regulation. This change will serve to strengthen vertical interest in agricultural production.

They are counting on bearing a burden in agriculture proportionate to the other branches of the economy, naturally taking into consideration the peculiarities of foodstuffs production. The export of foodstuffs, especially of products which can be produced economically, must increase further in the coming year. This can be achieved basically by increasing volume, because according to the forecasts thus far we cannot count on a tangible improvement in the prices for our foodstuffs export.

In 1985 the size of the developmental resources available to agriculture will be of the same order of magnitude as planned for 1984. But it will be possible to achieve a strengthening of personal interest with an increase in nominal earnings 1-2 percentage points greater than this year.

An increase in producers' (purchasing) prices and production price supplements will essentially counterbalance the increase in the price level for materials and tools used in agriculture in 1985. The profitability of crop production will moderate somewhat--but will still be essentially higher than that of animal raising--and the profitability of the animal husbandry branches and products, struggling with problems, will improve. So there will not be a fullscale price change in agriculture and the foodstuffs industry, there will only be price corrections.

Income and profit are differentiated to a substantially greater degree in agriculture than in other producing branches of the economy--due to differing natural conditions and greater efficiency differences. The regulator changes will not increase the differentiation. We expect from the income regulation that farms with good and medium conditions which are backward in development will catch up to the average in both production and income.

The 9- and 11-percent increase in the prescribed prices for artificial fertilizer and crop protection materials respectively presumes an increase in product prices too. The small increase in purchasing prices (1.5 percent) applies to those products the profitability of which fell to a great degree in recent years due to an increase in costs. The domestic sugar supply requires an improvement in interest in producing sugar beets, so the purchasing price for sugar beets is being raised by 10 forints per 100 kilogram. Fulfillment of delivery obligations undertaken in inter-state contracts will be aided by an increase in the price of export winter apples of 0.50 forints per kilogram. Our conditions and production policy considerations justified an improvement in the profitability of the branch of animal husbandry which consumes the least grain feed, sheep raising. The producers' price for slaughter sheep will rise by 9 forints per kilogram and the price for wool will rise by an average of 4 percent.

There will be only minor corrections in the price mechanism for agricultural products too. For example, rye and sunflowers, which had authoritative prices up to now, will go into the orientation price form and the purchasing price for the new crop of edible potatoes in 1985 will become free.

State support for agriculture and foodstuffs production will be a tool for influencing production and marketing for a long time still. In the branch one can count on a gradualness in narrowing the supports--probably at a slower pace than in earlier years--which is made possible by improving efficiency and increasing producers' prices. Some of the supports will be regrouped in 1985, adjusting to the production policy and export conditions.

In the cattle branch the milk price supplement will increase from the previous 1.60 forints per liter to 2 forints per liter and similarly the slaughter beef price supplement will increase from 6 forints per kilogram to 7 forints. The previous support given for strawberry planting will end. Machine price support for the large farms ended in earlier years; beginning in 1985 the 10-percent support given for machine acquisition by small producers will also end. Beginning in 1985 the budget will extend an automatic 20-percent support for purchase of irrigating machines.

The support given for exchange of sheep breeding stock will end and in its place a price supplement of 3.40 forints per kilogram will be given for the final product, for slaughter sheep.

In the past 5 years the supports system has included a 2-4-percent interest rebate for 16 investment purposes; this was introduced earlier together with a narrowing of developmental supports. The interest rebate aided the realization of production policy in that it made the interest costs of credits assumed for investments serving animal husbandry and foodstuffs processing, the

profitability of which is a good bit smaller than the national economic average, proportionate with their profitability. In the interest of maintaining the real value of the interest concession the interest concession will increase to 5-7 percent beginning in 1985--on credit for new investments.

In the future the regulator system for agriculture will include differentiated support for farms operating under production conditions that are weaker than the average.

Beginning next year support under the heading of unfavorable conditions will go to all those large agricultural operations at which the average gold crown value per hectare of the plow land was under 19 gold crowns in 1984. The price supplement for the products of crop production sold--with the exception of decorative plants and mushrooms--will be uniform to differing degrees depending on land quality; that is, there will be a higher price supplement on worse land. Thus the previous separate price supplement will end.

A similar price supplement is being established for animal husbandry--but it will be of smaller size than heretofore. The products of cattle, sheep and goat raising will get a price supplement identical to that for crop production --by land quality category.

The multiplicity of the goals intended to be achieved with support for large farms with unfavorable conditions continue to make necessary multi-channel support. In addition to the price supplements aimed at offsetting the extra costs deriving from land quality it will be an unchanged element of the supports system that there will be developmental support, differentiated incentive for expanding profitable supplemental activities and state support aiding employment and settlement of experts.

In the taxation of incomes of large agricultural operations the land tax will continue to withdraw a part of the income differences deriving from natural conditions and the taxation of incomes will take place according to the proven form of taxing gross income. This also applies to the foodstuffs industry special branches mentioned at the beginning of the article. Beginning next year the city and community contribution will increase from 1 percent to 3 percent--still calculated on the gross income tax base.

The development of financial conditions for industrial, construction industry and service activity done in the large agricultural operations identical with the other economic branches--in the event of the same activity--will continue to be realized with the production tax. The effect of the 1985 regulator changes will make necessary smaller tax key corrections for the "sector difference".

Central average wage regulation will end in agriculture too beginning in 1985. New forms--in part proven already in experiments--encouraging payments more proportionate with performance will be introduced beginning in 1985. The large agricultural operations can choose among three forms, but must use the form chosen for 3 years.

a. In wage regulation depending on the gross income level the tax free figures depends on the per capita gross income level of the previous year. This form of earnings regulation is supplemented by a concession to encourage a reduction in personnel and the production of vegetables. In this form of earnings regulation use for shares purposes is exempted from the shares tax as a function of the per capita profit.

b. In wage bill regulation linked to a change in added value the wage bill can be increased by 0.4 percent for each 1-percent increase in added value; in the event of a decrease in the index the wage bill must be reduced by 0.3 percent for every percent. In this form of regulation also use for shares purposes can be paid according to the shares tax mentioned above.

c. It is the essence of large operation earnings taxation that every wage paid has a tax obligation. The large operation pays the tax on the basis of the annual earnings of each worker--broken down into earnings brackets. The magnitude of the tax is 0-50 percent. The first earnings bracket is tax free in the interest of having the farm bring in family manpower and "fractional" manpower. The broader use of large operation earnings taxation is not aimed at increasing the ratio or total of income withdrawal in agriculture. For this reason this form is being supplemented by an income tax concession corresponding to the earnings tax appearing on the basis of the number of personnel and personal income for 1984.

On farms using large operation earnings taxation it is necessary, in order to influence the out-flow of earnings in 1985 in a way corresponding to what is planned, to build into the regulation an element which will make it possible for earnings to increase proportionate to performance. We want to achieve this goal with a method similar to the one used in enterprise earnings regulation. Where the increase in average earnings exceeds 5.5 percent and the increase in added value is less than that of the wage bill, an extra earnings tax must be paid.

Developmental resources of the same order of magnitude as in 1984 are planned in agriculture in 1985, but with a new tax form. In agriculture and in the special branches of the foodstuffs industry mentioned the withdrawal of developmental resources will take place with a tax, the accumulation tax. The base for this will be all investment expenditures--carried out from their own sources, from supports and from investment credit--and the performance value of investments they carry out themselves and the increment in the circulating fund financed from their own resources and from credit. In agriculture the accumulation tax will be differentiated according to land quality, for three farm groups. Plantation, melioration, a certain group of agricultural machines and increments in agricultural stockpiles of what they produce themselves receive a concession from this tax.

The general accumulation tax key for managing organizations belonging in this form of income regulation is 20-23 percent. Where the plow land of the farms has an average gold crown value of 14-19 the accumulation tax is 17-20 percent. Under 14 gold crowns it is 5-8 percent. Establishing the concrete tax size between the from-to limits will take place when the 1985 plan is finalized.

Beginning in 1985 the large agricultural operations also will generate a new type of interest [erdekeltsegi] fund. In the course of distributing the profit the farms will generate a profit reserve from the profit according to the balance; after that they subtract items to be retained from the untaxed profit. Then they generate the city and community contribution and pay the income tax. The remainder is the interest fund, which is increased by amortization and every item which earlier belonged to the interest fund. From this fund they must cover the taxes regulating developmental resources and those connected with farm and personal incomes. Following this the farm decides freely about the sums or ratios turned to personal income and to accumulation. Naturally the earnings tax and the accumulation tax influence the decision.

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## YUGOSLAVIA

### FOREIGN EXCHANGE SPENT TO SUPPLEMENT MARKET SUPPLY

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 8 Nov 84 p 5

Article: "Regulator for Orderly Supply and Regular Production"

Text Since the second half of 1983, the supply and demand of products of particular significance for the population have been balanced. This trend is still continuing. The satisfactory supply situation was considerably influenced, in addition to the good harvest in agriculture and the growth of industrial production, by the measures and actions stipulated by the social agreement on securing and utilizing foreign exchange for payments for priority imports of certain products, local border trade, and barter transactions.

The results achieved in implementing the social agreement above all confirm that it is possible to use intervention measures successfully to solve the problems of budget deficits in agricultural-food products, and to have a favorable effect on ensuring regular production that is of particular significance for supplying the population. Although the 1984 social agreement was signed somewhat late (implementation was postponed in the first quarter of this year), the supply of the domestic market with products of vital significance for the population was relatively good. The organizations of associated labor possessed short-term stocks of raw materials and finished products that made it possible for supply to be at a satisfactory level for the entire period to date. No significant problems occurred in securing foreign exchange either, since imports were primarily obtained with a delayed method of payment. The National Bank of Yugoslavia has thus far issued \$472.7 million in foreign exchange guarantees to pay for products designated by the social agreement. Because of the delayed payment, the organization of associated labor realized \$167 million by the end of August. Otherwise, the total amount of funds used for intervention by National Bank of Yugoslavia is \$560 million (\$350 million from unidentified foreign exchange receipts, and the rest through allocation from foreign exchange receipts at a rate of 2.7 percent). The OURs have ensured their own participation primarily through barter or other transactions, and this has often led to a discrepancy between the foreign exchange guarantees that were approved and the payments for imports.

As for the implementation of the agreement, it should be stressed that by the end of August, about 140,000 tons of refined sugar and 24,000 tons of unrefined sugar were imported. In addition to this, we imported about 90,000 tons of

cooking oil and 147,000 tons of soybeans, as well as 9,300 tons of coffee. We used \$30 million to import raw materials for the production of detergent. In 8 months, 1.8 million tons of fertilizer were delivered to the domestic market, and 250,000 tons were exported. We also imported 42,696 tons of fish meal, 83,000 tons of oil seeds, and 3,800 tons of meat meal.

Numerous unfavorable circumstances were also recorded in the implementation of barter arrangements, as the experts note. Nevertheless, viewed as a whole, the barter arrangements had a positive effect on an increase in production and better supply of the domestic market, primarily with products of particular significance for the population. And with respect to local border trade with the neighboring countries, especially with Italy, it contributed to increasing exports of goods that could be difficult to market in regular exports, and also made it possible to import the products necessary for production intended for the domestic market. Last year, in local border trade with Italy, we imported more than 35 percent of the required amounts of protein livestock feed.

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CSO: 2800/99

## YUGOSLAVIA

### ABUSES OF FOREIGN TRADE NETWORK

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 24-26 Nov 84 p 6

/Article by Andja Petrovic: "Outcry Not Without a Reason"/

/Text/ It could appear to some people sometimes that the "outcry" about the foreign trade network in Yugoslavia and abroad is exaggerated, but judging by the findings of the Social Accounting Service /SDK/ of Yugoslavia concerning their operations in 1982 and the financial results in the first half of this year, it does not seem to be. Although these findings should not really be considered tragic either, they must be given a great deal of consideration in forming an opinion about such an important sector of the work of the Yugoslav economy.

The SDK of Yugoslavia audited the operation of 115 foreign trade organizations receiving social funds that have commercial offices abroad (under different names and forms), which is less than 30 percent of the total number. Illegalities and various inproprieties in work were revealed at 96, which is very disturbing. The SDK experts say that the ratio of these numbers would be similar if all of them had been audited. The essential thing is that such phenomena have been noted at a very large number of them, although there are differences.

The most serious criticism being stressed is that these organizations (foreign trade organizations, enterprises, operations, and other work units through which the founders from Yugoslavia performed economic activity abroad) are not fulfilling the intentions concerning the combination of production and trade organizations of associated labor in accordance with the law on the mandatory combination of work and funds for the purpose of foreign trade. One can still conclude from the findings that a large part of their business is being conducted through the sale or purchase of goods on their own account and in their own name, instead of on the producer's account and in his name. They earn a considerable part of their income by the sale of foreign exchange above the official exchange rate, often through fictitious self-management agreements of combining work and funds, the



purchase and sale of foreign exchange through goods and services, etc. There are ones that work but are not included in the court register for that business, ones that fulfill their contractual obligations in a careless and negligent manner, and ones that import but do not export; some conclude self-management agreements with several producers for the same goods without consultation...

For some of these violations, it could be thought or said that they were caused by necessities, that the regulations are inappropriate, that there are great difficulties, etc. There is quite certainly some of that, but how can one justify postponement of the disclosure of negative results in export business, from sales, for example, at prices lower than those of the producer, and from similar causes? How should one understand the fact that there are no accounting data on many transactions? And why is foreign exchange regularly not distributed to the recipients but instead kept too long in one's own accounts abroad? Can it be an accidental occurrence when foreign exchange funds are loaned for the private purchase of an automobile or other personal things, when they are social funds?

The SDK of Yugoslavia has also noted the difficulties facing these--let us call them commercial--operations abroad. Yugoslav regulations and even the laws are full of weaknesses that are mostly known, but also many that little is heard about. They hinder some people, and benefit others. In order to reduce such possibilities and help those who want to work for the benefit of society, it would be good to become acquainted with the proposals made by the service. We believe that the authorities will do this, and we will briefly present the main proposals here.

The SDK considers it necessary to prescribe the obligation to make a record of foreign trade business resulting from commission relations, and to coordinate the terms of application of payment guarantees with the deadlines for bringing the foreign exchange to Yugoslavia. It is being proposed that a measure be introduced by which the approval for the establishment of an enterprise abroad would cease if the founder did not make it possible to audit the handling of social funds. In a large number of cases, the auditors noted that the founder had increased the founder's contribution to an enterprise that was not capable of meeting its obligations, and so this should be prevented, along with a bank or organization of associated labor giving a guarantee to someone who is not capable of meeting his current obligations.

Those performing work abroad come under a separate heading. They still do not have a law that would regulate their work, since it has been in the predraft stage for a very long time. The SDK probably reviewed their conditions along with the rest and included the results in the total. We could single out one feature to which attention is being

called; the SDK proposes that they be obligated to transfer their profits to Yugoslavia in accordance with the final account of the work unit abroad, which has not been done in the past.

Accidentally or intentionally, the last trick is that in which business units, which are responsible for their operation being in accordance with the regulations of the host country, find a solution for their failures by shifting their losses into the final accounts that go to Yugoslavia, since "there" they would not be kept anymore, and "here" they will, and so the losses are still covered from other sources. So who says that this is not the promised land?

9909

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## YUGOSLAVIA

### REASONS FOR DECLINE IN OOUR'S DISCUSSED

Zagreb DANAS in Serbo-Croatian 13 Nov 84 pp 45-46

[Article by A. Kobasic: "What Is Happening With OOUR's?"]

[Text] In the last year and a half, the numerous changes in the organization of OOUR's [Basic Organizations of Associated Labor] all over the country have almost assumed the proportions of a campaign. After 1981, when the most OOUR's were noted in Yugoslavia (a total of 20,939), there was first a halt in growth, and then an abrupt reduction in the number of OOUR's. During 1983 alone, more than 400 OOUR's "disappeared," and that "disappearance" continued in 1984 at an even faster rate. According to many articles in daily newspapers and periodicals, the impression is being created that some broader process of the "reconstruction" and elimination of basic organizations is under way. Why is this so and what are the causes?

#### Interpreters and Models

In the meantime, there were no changes at all in the regulative-legal and social basis for the formation of OOUR's, and so logically the causes should not be sought in that. If one goes by the various explanations for such changes that are given in the public media, it turns out that there are at least three different views of the causes of the present unsatisfactory situation in the organization of OOUR's, as a result of which the changes are taking place. According to these views, the causes could be classified into three groups, as follows: a) the deviant and inefficient behavior of some OOUR's; b) inconsistent application of the provisions of the Law on Associated Labor [ZUR] when OOUR's are established; and c) shortcomings in the ZUR concept of OOUR's. Regardless of which causes are involved, it is difficult to explain why a "maturing" of the awareness of the unsuitability of the existing solutions is occurring after the existing OOUR's have been in operation for 7 or more years; and why is it happening at almost the same time in all the cases where changes are occurring? Some people feel that the present economic crisis has hastened the "maturing" of this idea, and one can also read that "some people go so far as to blame the OOUR's for the unfavorable economic situation, and to consider the formation of OOUR's an error that should be corrected...by the elimination of OOUR's."

With respect to the deviant behavior of OOUR's and their inefficiency, a question immediately arises--what promoted such behavior? Certainly some prerequisites for the unexpected behavior were "built into" "the very way in which the conditions for production are distributed, which is often neither self-managing nor economically efficient" (N. Knezevic). Deviant and inefficient behavior begins, however, when on the basis of these prerequisites an OOUR acts as an autonomous economic entity which is sufficient unto itself and which cuts across the functional lines of the work organization as a complete system. These are the situations in which the erection of barriers, entrepreneurial behavior, OOUR's supplying themselves with the services for independent operation, the accumulation of administration, opposing interests, etc., occur. Such behavior is deviant and inefficient at the same time, but it should not be taken as a general characteristic or as a typical model of OOUR's in practice.

Inconsistent application of the constitutional provisions and the ZUR has created many OOUR's which have been inclined toward deviant behavior since their establishment. It could be said that some provisions of the ZUR itself left considerable possibilities for inadequate interpretations of the constitution's intentions, and even for the formation of inadequate OOUR's (for example, the definition of the working whole, the definition of rights, the obligation of a transfer account, engaging in activities, etc.). This particularly applies to the definition of the working whole that is organized as an OOUR. E. Kardelj, in his "Brioni Discussions," before the adoption of the ZUR, gave an interpretation of the foundations for the definition of such a working whole, stating that it is "a basic, united, and independent part of the process of production, in which the work of the workers is most directly technologically linked, i.e., in which the workers work with means of production which in the technological sense represent a basic, united, and indivisible whole and in which the workers are most directly dependent with respect to earning income."

Article 321 of the ZUR did not adopt these provisions on the technological unity of the whole, and thus we have several examples in which existing OOUR's are breaking up the unity of the technological process, which is inefficient, and is a consequence of the inadequate establishment of OOUR's.

The inadequate definition of the working whole is undoubtedly the most widespread cause of the inefficient behavior of OOUR's (and also of their deviant behavior--in addition to the above-mentioned causes in the "distribution of the conditions").

The most frequently mentioned shortcoming in the ZUR concept of OOUR's is the untenable generalization concerning the same relationship and form of internal organization in the large technical systems (with a high level of technological and economical cooperation) as in the remaining economic organizations, since the OOUR's in such large systems

"break up the production, economic, and organizational-management unity." What is a strong incentive factor for work in other work organizations can have the opposite effect in large technical systems (the organization of the railroads, with 365 OOUR's in the republic organizations, is often mentioned as a caricature of the formation of OOUR's). Admittedly, article 324 of the ZUR provided for the possibility that in particular cases, the organization of OOUR's would be regulated by different laws, but this nevertheless remained within the framework assigned by the ZUR.

#### Why a Campaign

Since we could not free ourselves of generalization in organizing OOUR's, we are also starting with generalizations in today's reorganizations. The above-mentioned elements of a campaign in the approach to the reorganization of OOUR's point to the conclusion that we are proceeding from an assumption that the existing network of OOUR's is generally inefficient. In recent months, there has been almost no activity or area where some reorganization of OOUR's has not been initiated. The final outcome of such processes can be seen in the decreasing number of OOUR's. What led to this decrease was, on one hand, the elimination of OOUR's within several work organizations, and on the other, the so-called "enlargement" of basic organizations (through mergers).

What is the source of such differences and the parallel existence of so many contradictory and even diametrically opposed solutions in similar situations and in the same businesses? If the former (concrete) OOUR's were "a necessary legal form," how is it that this form is no longer "necessary," if nothing has changed in the legal regulations? (When this form has not been consistently respected--now or before.) Or if some OOUR's have tried to "spend more," what were the socioeconomic basis and the relations that inducted them to spend and not earn income? If an "enlargement" of OOUR's is taking place through the merger of several former ones into one, then what happens to the provisions of article 325 of the ZUR, which read as follows: "Workers cannot organize a basic organization from several parts of the work process if each part by itself can be organized as a basic organization under the provisions of article 320 of this law?" (Probably such parts have met the conditions when the court has previously registered them as OOUR's.)

Is it not persuasive that in some cases former enterprises and later OOUR's, in the new reorganizations, cannot be confirmed as wholes and organized as OOUR's, even though in the technological sense (and in terms of income) they have been shown to be working wholes? If several small OOUR's "break-up" the unity of a work organization RD then what happens with large ones, to which the erection of barriers, entrepreneurial behavior, a desire to complete all the services, the accumulation of administration, etc., are attributed.

There are undoubtedly many criticisms of the existing structure and organization of OOUR's, but this cannot be corrected through campaigns. It is difficult to assume that the situation covered by article 326 of the ZUR has occurred in such a large number of OOUR's, and that as a result of a change in the material base of work or some other changes, there has been a change in the conditions that existed at the time when these OOUR's were formed, since most of the changes are being made within the framework of the existing work organizations, which have not changed the initial structure and technical-technological conditions at all. The organization of the economy, and thus the OOUR's, is an economic process and not a fad, and should therefore be approached in a more studious manner and without generalizations, especially without campaigns.

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YUGOSLAVIA

FOREIGN INVESTMENT IN OUR'S PRODUCING MILITARY EQUIPMENT

Belgrade SLUZBENI LIST SFRJ in Serbo-Croatian No 65, 7 Dec 84 pp 1417-1418

[Decree of the Federal Executive Council issued in Belgrade 8 November 1984 and signed by its vice chairman Dr Mijat Sukovic: "Decree on Investment of the Capital of Foreign Juridical and Physical Persons in Organizations of Associated Labor [OUR] Manufacturing Armament and Military Equipment"]

[Text] Article 1

Contracts on the investment of capital of foreign juridical and physical persons in organizations of associated labor manufacturing armament and military equipment (hereinafter "investment contract") shall be concluded and performed by organizations of associated labor manufacturing armament and military equipment (hereinafter "organizations of associated labor"), the Federal Directorate for Sales and Reserves of Special-Purpose Products (hereinafter the "Federal Directorate") and the Federal Secretariat for National Defense, under the conditions and in the manner envisaged by law and this decree.

Article 2

The Federal Secretariat for National Defense and the Federal Directorate may pool capital with organizations of associated labor for the purpose of the investment referred to in Article 1 of this decree.

Article 3

The Federal Directorate shall conclude with a foreign juridical and physical person (hereinafter a "foreign person") a contract on investment in an organization of associated labor in its own name and on the account of that organization of associated labor.

The Federal Directorate and an organization of associated labor shall conclude a self-management accord or contract whereby they set forth their mutual relations, rights and obligations, as well as the authorization of the Federal Directorate to conclude an investment contract.

#### Article 4

The Federal Secretariat for National Defense shall grant or deny approval to an organization of associated labor or to the Federal Directorate to take the actions preliminary and preparatory to concluding an investment contract within 60 days from the date when the application for approval is submitted.

The approval referred to in Paragraph 1 of this article shall be valid for 6 months from the date of issuance.

#### Article 5

Preliminary and preparatory actions referred to in Article 4 of this decree refer to the following: collection of information concerning the foreign person interested in investment of capital, negotiations with the interested foreign person, and establishment of contractual relations.

#### Article 6

The application of an organization of associated labor or the Federal Directorate for the approval referred to in Article 4 of this decree should contain information on the following:

- 1) the corporate name or title and address of the applicant;
- 2) the corporate name or title and address of the organization of associated labor in which the capital is to be invested;
- 3) the corporate name and address of the foreign person interested in the investment;
- 4) the name of the investment program, the purpose of the investment, and the anticipated economic benefit of the investment;
- 5) the capital of the foreign person required for investment;
- 6) the measures to protect secret data related to development and production of armament and military equipment.

#### Article 7

The approval referred to in Article 4 of this decree, aside from the data referred to in Article 6 of this decree, shall also contain instructions as to satisfying certain technical-and-economic, security and other conditions which must be provided for in a contract with a foreign person.

#### Article 8

The application for approval referred to in Article 6 of this decree shall be accompanied by the technical-and-economic study concerning the needs and the technical-and-economic benefits of the investment (the investment program).



The technical-and-economic study referred to in Paragraph 1 of this article must contain the following:

- 1) data on the sources of the capital being invested by the organization of associated labor or Federal Directorate or any other organization or sociopolitical community in Yugoslavia;
- 2) data on the technical composition of the investments projects which are to be carried out by the joint venture and on the features of the engineering and technology;
- 3) data on the type, quantity and value of equipment, raw materials and production supplies which must be imported;
- 4) data on the possibility of securing adequate quantities of domestic raw materials for the production program;
- 5) data on the situation as to specialized personnel and the program for training them;
- 6) data on the possibility for selling the product on the domestic and foreign market;
- 7) the anticipated economic benefits of the investment.

#### Article 9

An organization of associated labor or the Federal Directorate shall submit to the Federal Secretariat for National Defense an application for a permit to conclude an investment contract. The application for the permit referred to in Paragraph 1 of this article shall contain information on the following:

- 1) the corporate name or title and address of the applicant;
- 2) the corporate name or title and address of the organization of associated labor in which the capital is being invested;
- 3) the corporate name and address of the foreign person investing the capital;
- 4) the total amount of capital being invested to carry out the joint venture and especially the amount which the foreign person is investing and the amount being invested by organizations of associated labor, the Federal Directorate and the Federal Secretariat for National Defense;
- 5) the dates and conditions for repayment of the invested capital to the foreign person;
- 6) the manner in which foreign exchange and other resources for payment to the foreign person are to be obtained.

The Federal Directorate shall append to the application referred to in Paragraph 1 of this article the self-management accord or contract referred to in Article 3 of this decree.

#### Article 10

The Federal Secretariat for National Defense shall issue or deny the permit for conclusion of the investment contract within a period of 30 days from the date the application was filed.

In addition to the information referred to in Article 8, Paragraph 2, of this decree, the permit referred to in Paragraph 1 of this article shall also contain the period of time for submittal of the contract after conclusion to be recorded.

The permit referred to in Paragraph 1 of this article shall be valid for 6 months from the date when the ruling is issued.

#### Article 11

An investment contract shall be submitted to the Federal Secretariat for National Defense for recording within the period specified in the permit referred to in Article 10 of this decree.

The application for recording a contract referred to in Paragraph 1 of this article shall be accompanied by the investment contract concluded (a photocopy of the original and a translation of the contract certified by the applicant), as well as the statement of approval and the permit referred to in Articles 4 and 10, respectively, of this decree.

The Federal Secretariat for National Defense shall not record a contract as referred to in Paragraph 1 of this article if it has not been concluded under the conditions and in the manner set forth in this decree.

Once entered in the register, the contract shall become valid as of the date of its conclusion.

#### Article 12

The register of contracts on investment of the capital of foreign persons in organizations of associated labor manufacturing armament and military equipment, which is kept in the Federal Secretariat for National Defense, shall contain data on the following: the corporate name or title and address of the contracting parties, on the organization of associated labor in which the investment is being made, on the armament and military equipment for which the investment is being made, on the share of the individual contracting parties in that capital, on the date of conclusion of the investment contract, and on the number and date of the ruling on entry of the investment contract in the register.

Article 13

Investment contracts to which this decree applies and which have been concluded before this decree takes effect, but have not been registered under the regulations in effect up to the date when this decree takes effect, shall be recorded in accordance with this decree.

Article 14

This decree shall take effect on the eighth day after publication in SLUZBENI LIST SFRJ.

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YUGOSLAVIA

INVESTMENTS IN FIRST 9 MONTHS OF 1984

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 21 Nov 84 p 4

/Article by Ljiljana Barjaktarevic: "Lower in Real Terms, Structurally Unfavorable"/

/Text/ Although the preliminary data that the Yugoslav SKD /Social Accounting Service/ traditionally reports each month before it compiles the final official balances should be received with a certain amount of caution, experience nevertheless indicates that they can be believed and that to a considerable extent they are a reliable indicator of everything happening in individual sectors of the economy. If they are accepted as such, the recently reported 9-month trends in the sector of investments could be described as follows: nominally, total investments in capital goods were increased by 41 percent, but if one takes the factor of inflation into account, they nevertheless lagged behind it and in the 9 months registered points on the side of a real decrease--by approximately 10 percent.

A similar thing happened with the structure of investments, and the epithet unfavorable could be deservedly "earned" for two reasons--not just that in the third quarter their restructuring, necessary in any case, did not take place, but also that investment is still being done primarily through bank credits, which at a time when they are becoming more expensive is very much a new attack on inflation. Over 2 years of investment, the 9 months have also undoubtedly been characterized by an enormous growth of investments being financed from the federal treasury, which would probably merit a separate analysis.

Thus, judging by the recently published report from the Yugoslav SDK, the total payments for investments in capital goods--not counting those from foreign exchange accounts in Yugoslavia, domestic and foreign commercial credits, financial foreign credits, investments by foreign partners, etc.--are 41 percent larger than during the same period last year. The largest contribution to their overall growth was made by the obviously lively investment activity in Slovenia, with a 66 percent increase in investments, followed by Croatia, with a 50 percent growth in its investments. All the rest lagged well behind the rate of overall growth at the national level, and for months now Montenegro has not given up the place of honor--in comparison with the same period last year, investments were only increased by 13 percent.

While on the whole, those contributions by the individual republics and provinces have been more or less maintained through all the months this year, there have been certain changes with respect to individual investors and the relations among them. With the third quarter, it appears that investment activity is reviving primarily in the organizations of associated labor in the economy and in the SIZs /Self-managing Interest Communities/ for material production, since the growth rate of 57 percent recorded in these 9 months differs considerably from the previous increases, which followed the average rate for the country. Otherwise, the fastest growth within them is still being shown by investments based on funds from transfer accounts (the work communities of the OURs /Organizations of Associated Labor/ of the economy are also included in the 74 percent growth), and the slowest, by those "fed" by joint expenditures (a growth of 26 percent).

While investments in the economy have shown considerable growth--although the Yugoslav SDK report leaves it a secret which purposes they were used for and whether the demands for their being redirected for priority branches are being satisfied--at the same time the organizations for social activities and the noneconomic sector are already lagging seriously behind them. The 39 percent increase recorded in the investment items of these recipients of social funds would certainly be measured even more by the already well-known determinations of economic and development policy, thus political ones as well, if the SIZs for social activities and housing, as well as the local communities, had not spoiled things with such calculations.

The 57 percent growth in their investments, at a time when in any case the "contribution" of the housing SIZs, because of the already well-known trends in this area, cannot be considered decisive, is quite certainly an innovation that does not promise anything good, especially if one bears in mind that these investments are an improbable 173 percent higher in Macedonia, 106 percent in Kosovo, and 100 percent in Montenegro. An answer to this dilemma in the 9-month investment is possible through a question--aren't these rates the "result" of concern on the part of the entire community, which is allocating rather large amounts of money from the federal treasury, according to regulations, and also on the basis of additional funds?

In contrast to them, the banking organizations as a whole have a more modest investment appetite--in the first 9 months of this year investments increased only 9 percent in comparison with the same months last year, due most of all to credits for housing construction, which are 15 percent higher.

With a 91 percent increase, the investments financed from the federal treasury (including the funds of the working community organs and organizations of the sociopolitical communities /DPZ/) have a convincing lead among the investments of the sociopolitical communities. And judging by the report from the Yugoslav SDK, the bulk of this money went to Serbia proper, where a 97 percent increase was recorded in the item for this purpose. The federal treasury is followed by investments in the opstinas, with a 57 percent increase, primarily the ones financed by the budget (a 64 percent growth). It appears that the republics and provinces were the most moderate, since the investments originating at that level showed a growth of only 29 percent.

Finally, if one bears in mind that in this period bank deposits increased by 61 percent, the quality of the new investments is also clear, especially since the highest growth rates have been registered under this item for a long time now. Obviously, if one's own money is insufficient, the solution is still a bank credit, even though its increased expense today requires more consideration before a decision on it can follow.

9909

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YUGOSLAVIA

FOREIGN CONSTRUCTION OF FACILITIES OF DEFENSE INTEREST

Belgrade SLUZBENI LIST SFRJ in Serbo-Croatian No 65, 7 Dec 84 pp 1418-1419

[Decree of the Federal Executive Council issued in Belgrade 8 November 1984 and signed by its vice chairman Dr Mijat Sukovic: "Decree on Letting a Contract for Construction of a Capital Investment Project of Interest to National Defense to a Foreign Contractor"]

[Text] Article 1

This decree regulates the letting of a contract for construction of a capital investment project or performance of individual operations on a capital investment project which under separate regulations is of interest to national defense to a foreign contractor (hereinafter "construction of a capital investment project").

Article 2

The Federal Directorate for Sales and Reserves of Special-Purpose Products (hereinafter the "Federal Directorate"), on the basis of an authorization obtained from the Federal Secretariat for National Defense, pursuant to the provisions of the Law on Economic and Other Relations in the Production and Sales of Armament and Military Equipment, shall conclude the contract with the foreign contractor for construction of the capital investment project on the account of the organization of associated labor which is the investor.

In the case referred to in Paragraph 1 of this article the Federal Directorate and the organization of associated labor shall conclude a contract to regulate their mutual rights, obligations and responsibilities.

Article 3

The application for issuance of approval to take the actions preliminary and preparatory to letting a contract to a foreign contractor for construction of a capital investment project submitted by an organization of associated labor or the Federal Directorate to the Federal Secretariat for National Defense shall contain the following:

- 1) the corporate name or title and address of the applicant;

- 2) the corporate name or title and address of the investor;
- 3) the corporate name and address of a possible foreign contractor to whom the contract for construction of the capital investment project might be let;
- 4) a description of the project or parts of the project for which the contract would be let to the foreign contractor;
- 5) the manner in which capital to finance construction is being obtained;
- 6) a set of measures proposed for protection of secret data.

The application referred to in Paragraph 1 of this article shall be submitted together with the technical-and-economic analysis of the justifiability of letting the contract for construction of the capital investment project to a foreign contractor and documents confirming that the foreign exchange has been obtained for this construction project.

#### Article 4

The Federal Secretariat for National Defense shall issue or deny approval for taking actions preliminary and preparatory to letting a contract for construction of a capital investment project to a foreign contractor within 30 days from the date the application was filed.

The approval referred to in Paragraph 1 of this article shall contain the information referred to in Article 3, Paragraph 1, of this decree, and shall be valid for 9 months from the date of issuance.

#### Article 5

The preliminary and preparatory actions referred to in Article 3 of this decree refer to collection of information concerning the foreign contractor, negotiation with the possible foreign contractor and establishment of contractual relations.

#### Article 6

In addition to providing the information referred to in Article 3 of this decree, in the approval referred to in Article 4 of this decree the Federal Secretariat for National Defense shall state whether the organization of associated labor or Federal Directorate shall let the contract for construction of the investment project to a foreign contractor by public competition or by collection of bids or by direct negotiation.

#### Article 7

Before letting a contract for construction of a capital investment project to a foreign contractor, the organization of associated labor or Federal Directorate shall file application with the Federal Secretariat for National Defense for issuance of approval for conclusion of the contract.



The application referred to in Paragraph 1 of this article shall contain the title or corporate name and address of the applicant, the corporate name and address of the foreign contractor with which the contract is being concluded, the subject matter of the contract, and the number and date of the approval referred to in Article 6 of this decree.

Along with the application referred to in Paragraph 1 of this article the application shall provide data on the terms and conditions of the contract which have been arrived at in negotiations or shall append the agreed text of the contract which shall be signed.

#### Article 8

The Federal Secretariat for National Defense shall issue or deny approval for letting a contract for construction of a capital investment project to a foreign contractor within 10 days from the date the application was filed.

The approval referred to in Paragraph 1 of this article shall contain the data referred to in Article 7, Paragraph 2, of this decree and shall be valid for 6 months from the date of issuance.

#### Article 9

The Federal Directorate or organization of associated labor shall file application with the Federal Secretariat for National Defense to enter a contract with a foreign contractor for construction of a capital investment project in a special register kept in that secretariat within 30 days from the date of the contract's conclusion.

The application referred to in Paragraph 1 of this article shall be accompanied by the contract drafted in one of the languages of the nationalities of Yugoslavia, a photocopy or copy of the approval referred to in Article 8 of this decree, and evidence that the foreign exchange has been provided for to pay the foreign contractor in accordance with the contract concluded.

#### Article 10

The register referred to in Article 9 of this decree shall contain the titles or corporate names and addresses of the contracting parties, the subject matter of the contract, the date and place of the contract's conclusion, the face value of the contract in dinars and foreign currency, and the number and date of the ruling on entry of the contract in the register.

#### Article 11

The Federal Secretariat for National Defense shall make the ruling on entry of the contract in the special register within 30 days from the filing date of the application for recording the contract.

The ruling referred to in Paragraph 1 of this article shall be delivered to the applicant and the National Bank of Yugoslavia--Military Service.

The Federal Secretariat for National Defense shall not enter a contract in the register if it has not been concluded under the conditions and in the manner set forth in this decree.

A contract for construction of a capital investment project which has been let to a foreign contractor shall be valid as of the date of entry in the special register.

#### Article 12

Material for construction of a capital investment project or for performance of particular operations on a capital investment project and for equipment being installed in a capital investment project whose importation into Yugoslavia is not unrestricted, may be imported by the domestic investor on the basis of approval from the Federal Secretariat for National Defense.

The Federal Secretariat for National Defense shall issue or deny the approval referred to in Paragraph 1 of this article within 45 days from the date the application was filed, after having obtained the opinion of the Federal Secretariat for Foreign Trade and the Federal Secretariat for Energy and Industry.

The Federal Secretariat for National Defense shall issue the approval referred to in Paragraph 1 of this article when the type and importance of the capital investment project or of the individual operations on the capital investment project require that that project be built or those operations performed with imported materials or imported equipment be installed in the capital investment project because such materials or equipment cannot be obtained in Yugoslavia or because of special qualitative or other characteristics of those materials or equipment.

#### Article 13

When the interests of national defense so require, the federal secretary for national defense shall approve the necessary departures from the conditions for conclusion of contracts prescribed by this decree.

#### Article 14

Contracts for construction of capital investment projects let to foreign contractors covered by this decree which have been concluded before the date when this decree takes effect, but have not been entered in the register pursuant to the regulations that were in effect up to the date when this decree took effect, shall be entered in the register in accordance with this decree.

#### Article 15

This decree shall take effect on the eighth day after publication in SLUŽBENI LIST SFRJ.

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- END -